United States Department of Agriculture

Forest Service

North Central Forest Experiment Station

Resource Bulletin **NC-105**

Illinois' Forest Resource

Gerhard K. Raile and Earl C. Leatherberry

Illinois Department of Conservation
life and land together

Information contained in this report includes the most commonly used forest inventory and analysis statistics. However, additional forest resource data can be provided to interested users. Persons requesting additional information that can be provided from the raw inventory data are expected to pay for the retrieval costs. These costs will range from less than $100 for a simple request to $2,000 for a complete retrieval involving the services of a Forest Inventory and Analysis computer programmer. If requests for data conflict with ongoing resources evaluation work, they will be scheduled to minimize the impact on the work unit.

Requests for unpublished information should be directed to:

Project Leader
Forest Inventory and Analysis Project
North Central Forest Experiment Station
1992 Folwell Avenue
St. Paul, Minnesota 55108

Phone: (612) 649-5140

Area served: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin.

North Central Forest Experiment Station
Forest Service—U.S. Department of Agriculture
1992 Folwell Avenue
St. Paul, Minnesota 55108
Manuscript approved for publication February 8, 1988
1988

☆U.S. GOVERNMENT PRINTING OFFICE: 1988—557-764

FOREWORD

Forest Inventory and Analysis (FIA) is a continuing endeavor as mandated by the Forest and Rangeland Renewable Resources Planning Act of 1974, which was preceded by the McSweeney-McNary Forest Research Act of 1928. Its objective is to periodically inventory the Nation's forest land to determine its extent; condition; and volume of timber, growth, and depletions. This kind of up-to-date information is essential to frame intelligent forest policies and programs. USDA Forest Service Regional Experiment Stations are responsible for conducting these inventories and publishing summary reports for individual States. The North Central Forest Experiment Station is responsible for resources evaluation in Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin.

Fieldwork for the 1985 Illinois forest inventory was begun in the spring of 1984 and was completed in late 1985. Reports on the two previous surveys of Illinois' forest resources are dated 1948 and 1962.

ACKNOWLEDGMENTS

The North Central Station gratefully acknowledges the assistance provided by the Forestry Division, Illinois Department of Conservation, in collecting information on timber products harvested in the State.

Aerial photos used in the forest inventory were furnished by the USDA Agricultural Stabilization and Conservation Service and the Shawnee National Forest. Appreciation is also expressed for the cooperation of other public agencies and private landowners for providing access to sample locations.

CONTENTS

Page

Highlights 1
Background 2
Forest Area 3
Timber Volume 9
Growth, Mortality, Removals, and Biomass 12
Projected Timber Supply 14
Literature Cited 15
Appendix 16
- Accuracy of Survey 16
- Survey Procedures 16
- Comparing Illinois' Third Inventory with the Second Inventory 17
- Log Grade 17
- Principal Tree Species Groups in Illinois 20
- Metric Equivalents of Units Used in this Report 20
- Definition of Terms 21
- Tables 26

ILLINOIS' FOREST RESOURCE

Gerhard K. Raile
and Earl C. Leatherberry

HIGHLIGHTS

Area

- Forest land accounted for 4.3 million acres (12 percent of the State's land area) in 1985, compared to 4.0 million acres (11 percent) in 1962.
- Timberland occupied 4.03 million acres (94 percent of the forest land) in 1985, compared to 3.98 million acres (99 percent) in 1962.
- Reserved timberland totaled 235,600 acres in 1985 compared to 44,900 acres in 1962.
- Farmers and miscellaneous private individuals own 3.37 million acres, 84 percent of the timberland.
- The oak-hickory (2.0 million acres), maple-beech (1.0 million acres), and elm-ash-soft maple (0.7 million acres) forest types account for 93 percent of the timberland.
- The oak-hickory forest type declined 12 percent (275,500 acres) between 1962 and 1985.
- The maple-beech forest type area increased from 2 percent of the timberland area in 1962 to 26 percent (1.0 million acres) in 1985.
- Sawtimber stands account for 64 percent of the timberland, followed by poletimber (19 percent), sapling and seedling (17 percent), and nonstocked areas (less than 1 percent).
- Between 1962 and 1985, 84 percent of the timberland (3.4 million acres) was undisturbed by human activities and suffered no major damage.

Volume

- The total volume of live timber on timberland in 1985 was 5.3 billion cubic feet—4.8 billion cubic feet in growing-stock trees and 0.5 billion in rough, rotten, and short-log trees.
- Growing-stock volume increased 40 percent from 3.4 billion cubic feet in 1962 to 4.8 billion in 1985.
- Growing-stock volume per acre increased 39 percent from 865 cubic feet in 1962 to 1,200 cubic feet in 1985.
- Elm growing-stock volume dropped 27 percent due to Dutch elm disease—from 368 million cubic feet in 1962 to 267 million in 1985.
- Select white oak is the species group with the most sawtimber volume on timberland (22 percent of total volume), followed by other red oak (18 percent) and select red oak (8 percent).
- Hardwoods make up 98 percent of the growing-stock volume.
- Farmers own 43 percent of the growing-stock volume (2.1 billion cubic feet).
- Three forest types account for 92 percent of growing-stock volume; oak-hickory (54 percent), elm-ash-soft maple (19 percent), and maple-beech (19 percent).
- The cottonwood type has the most sawtimber volume per acre with 6,604 board feet.

Stand Conditions

- Net annual growth rate of growing stock was 96 million cubic feet or 2.0 percent of inventory in 1984. The growth rate for softwoods (2.7 percent) was higher than the growth rate for hardwoods (2.0 percent).
- Sawtimber growth was 437 million board feet in 1984 or 2.5 percent of inventory.
- Mortality of growing-stock trees was 1.4 percent of inventory in 1984 (66.6 million cubic feet) compared with 0.9 percent in 1961 (30 million cubic feet).
- Disease accounts for 38 percent of mortality.
- Sawtimber volume is concentrated in tree grades 3 and 4 (71 percent of sawtimber volume).

Timber Use

- Growing-stock removals, which totaled 30.1 million cubic feet in 1961, increased to 68.6

GERHARD K. RAILE is a Mensurationist and **EARL C. LEATHERBERRY** is a Geographer with the North Central Forest Experiment Station, St. Paul, Minnesota.

million cubic feet in 1984—36.7 million for timber products, 24.3 million for other removals, and 7.6 million for logging residue.
- The oaks made up 54 percent of 1984 growing-stock removals.
- Output of timber products from roundwood totaled 147.2 million cubic feet in 1984, 78 percent of which was fuelwood.
- Wood residue from primary plants totaled 11.5 million cubic feet in 1984, 1.5 million of which were not used.

Biomass

- Live shrub biomass yield (including trees less than 1 inch d.b.h.) was highest in the oak-hickory forest type—5,177 pounds per acre.
- Live tree biomass (trees greater than 1 inch d.b.h.) totaled 292.9 million green tons, or 73 tons per acre of timberland.
- Seventy-one percent of the live tree biomass is in stumps and boles of trees greater than 5 inches d.b.h., 19 percent is in the tops and limbs of these trees, and 10 percent is in trees less than 5 inches d.b.h.

Projections

- The low removals option projection shows inventory increasing from 4,835 million cubic feet in 1985 to 5,350 million cubic feet by the year 2015, an 11-percent gain.
- The high removals option projection shows inventory rising to 5,025 million cubic feet in 2002 and then declining to 4,950 million cubic feet by 2015. Removals are projected to exceed growth in 2015 by 8.6 million cubic feet per year.

BACKGROUND

Forests are important natural resources. The USDA Forest Service, in conjunction with appropriate State agencies, periodically conducts systematic Statewide inventories of forest resources. These inventories are used to estimate the extent and condition of forest land and the volume of timber, growth, and depletion. The previous inventory of Illinois' forest resources was concluded in 1962. This report is based on data collected in Illinois during 1984 and 1985. For the purpose of inventory and analysis of Illinois' forest resources, the State is divided into three survey units, based largely on topography and other physiographic considerations (fig. 1). Social, political, and economic factors are also determinants of forest resources. Therefore, a brief overview of the social and economic landscape of Illinois is presented here to facilitate the analysis of forest resources in a comprehensive Statewide context.

Illinois has 35.6 million acres of land. Most of that land, 88 percent or 31.4 million acres, is nonforest land. Two classes of nonforest land—cropland and pasture—account for more than 87 percent of the total nonforest area in Illinois:

Nonforest land use	Thousand acres
Cropland	24,755.0
Pasture	2,666.8
Other	3,942.7
Total nonforest	31,364.5

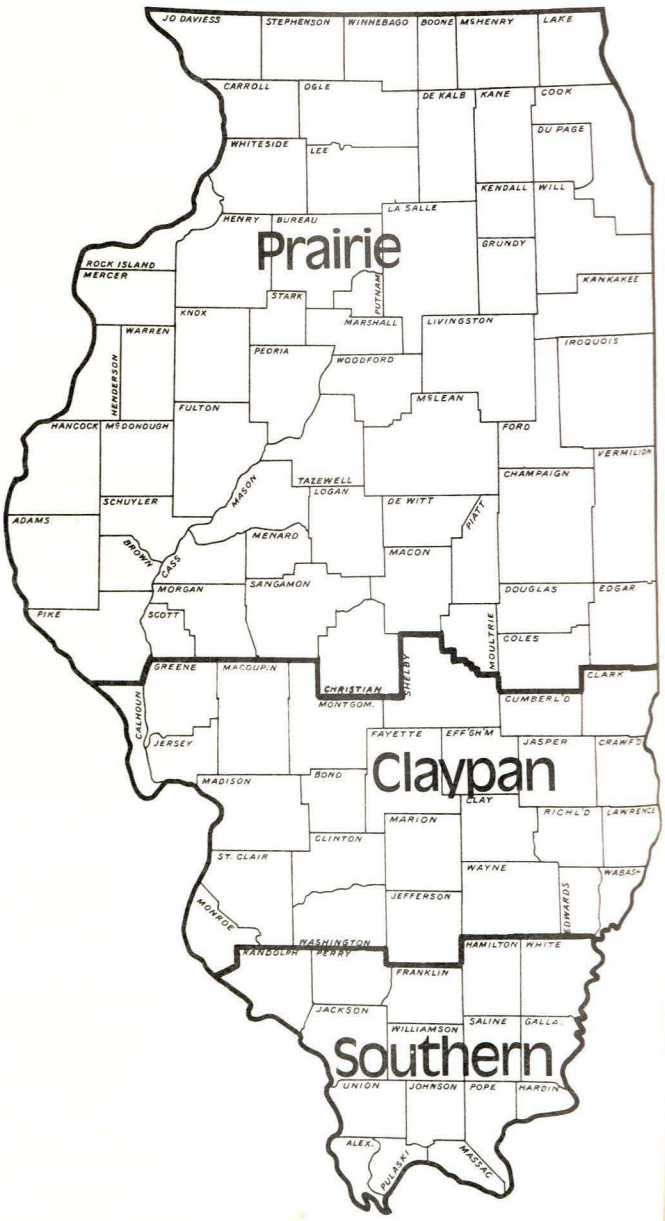


Figure 1.—*Survey Units in Illinois, 1985.*

Forest land in the northern two-thirds of Illinois consists of small tracts interspersed with agricultural and forest land found along rivers and in hilly areas. Farm service towns and cities dot the landscape. The larger service, manufacturing, and agricultural processing centers are located in this region of the State. Also, the greater Chicago metropolitan area is in the extreme northeast corner of the region and most land there is used to support urban activities. In 1984 7.2 million of the State's 11.5 million residents lived there (U.S. Department of Commerce 1985).

In the extreme southern part of the State, a far greater proportion of the land is forested. Roughly the southern third of the State, principally the Southern Inventory Unit, contains large, continuous blocks of forest land. There, more than a fourth (28 percent or 1.1 million acres) of the land is forest. The Shawnee National Forest is located in this Unit along with various State conservation and recreation areas.

Forest land in Illinois totals only 4.3 million acres, or 12 percent of the land base. Between 1962 and 1985, forest area in Illinois increased by an estimated 231,100 acres. Forest land is subdivided into three classes: (1) timberland—forest land suitable for producing industrial timber; (2) reserved timberland—forest land reserved for uses other than timber production; and (3) woodland—forest land that is unproductive and too poor to grow timber for industrial use. (See Appendix for other definition of terms.) Timberland occupied 4.03 million acres (94 percent of the forest land) in Illinois in 1985, compared to 3.98 million acres (99 percent) in 1962. Woodland occupied 9,000 acres in 1962, in 1985 there were none. Woodland is marginal forest land and woodland acres were probably converted to reserved land in natural/conservation areas. Forest land classified as reserved timberland increased by 425 percent, from 44,900 to 235,600 acres.

In the urban and agricultural central and northern portions of the State, forested areas are dispersed. In the southern portion, forested areas are in larger blocks and are more concentrated. Wherever they are located, forests are important to the social and economic well being of the State. They contain multiple-use resources that provide residents, visitors, and consumers with wood products, recreation/tourism opportunities, amenity values, and employment.

FOREST AREA

Distribution of Timberland

Timberland area in Illinois is dispersed throughout the State. The spatial distribution of timberland area in the State has changed. The 1962 inventory indicated that between 1948 and 1962, timberland (comparable to land previously called commercial forest land) in the Southern and Claypan Units increased by 5 and 2 percent, respectively. Timberland decreased by 16 percent in the Prairie Unit during the same period. The net result for the State was a loss of 5 percent between 1948 and 1962. A different spatial distribution of timberland area emerged in 1985. Between 1962 and 1985 timberland area in the Prairie Unit increased 17 percent. During the same period in the Southern and Claypan Units, timberland area decreased by 5 and 10 percent, respectively. The net result for the State was an increase of 1.2 percent (table 1). Illinois joins Wisconsin and Kansas as the only States in the North Central Region to increase timberland area between their most recent inventories. By comparison, Iowa and Missouri—Illinois' western neighbors—lost 36 and 11 percent, respectively, of their timberland areas between their most recent inventories.

Table 1.--Area of timberland by Forest Survey Unit, Illinois, 1962 and 1985

Forest Survey Unit	Timberland area		Change since 1962	Change since 1962
	1962	1985		
	Thousand acres			Percent
Southern	1,109.0	1,051.7	-57.3	-5.2
Claypan	1,417.1	1,277.6	-139.5	-9.8
Prairie	1,454.4	1,700.6	+246.2	+16.9
All Units	3,980.5	4,029.9	+ 49.4	+1.2

The temporal changes in the spatial distribution of timberland area in Illinois are due to social and economic forces. The recent increase in timberland area in the Prairie Unit is largely the result of changing agricultural practices and policies, which resulted in more pasture and wooded pasture land not being grazed (thus allowing some to be sufficiently stocked to qualify as timberland), and in marginal cropland reverting to timberland. Much of the recent loss of timberland in the Southern and Claypan Units was due to conversion to agricultural uses, reserved status, and urban encroachment.

Timberland Ownership

Nonindustrial private owners

Ninety percent of timberland area in Illinois is privately owned (fig. 2). Farmers own 45 percent of the total (1.8 million acres), other private parties own 38 percent (1.5 million acres), and miscellaneous private corporations own 7 percent (263,100 acres).

The proportion of land owned by nonindustrial private owners differs by region and owner background. For example, in the Prairie Unit, farmers own 58 percent of all timberland area. In the two southern units combined farmers own 36 percent of the timberland area. In the southern part of the State nonindustrial private owners are more likely to be private individuals.

Fifty-seven percent of the nonindustrial private timberland area is owned by parties with more than 50 acres of timberland. Another 26 percent is owned by parties with 21 to 50 acres. These areas represent the total area owned by any nonindustrial private party and may include noncontiguous tracts.

Size of holding (Acres)	Area owned by nonindustrial private parties (Thousand acres)
5,001 +	50.2
2,501-5,000	14.2
501-2,500	181.3
101- 500	993.5
51- 100	837.0
21- 50	937.3
11- 20	329.5
5- 10	199.0
1- 4	86.3
Total	3,628.3

Nearly three-fourths (73 percent) of the nonindustrial private timberland area has been owned by the same party for 10 years or more:

Owner tenure (Years)	Thousand acres
20 +	1,255.4
10-19	1,362.8
5- 9	804.7
1- 4	205.4
Total	3,628.3

Public owners

Ten percent (388,600 acres) of the timberland area in Illinois is publicly owned (fig. 2). The Federal government owns 75 percent of it (292,100 acres), the State of Illinois owns 14 percent (54,700 acres),

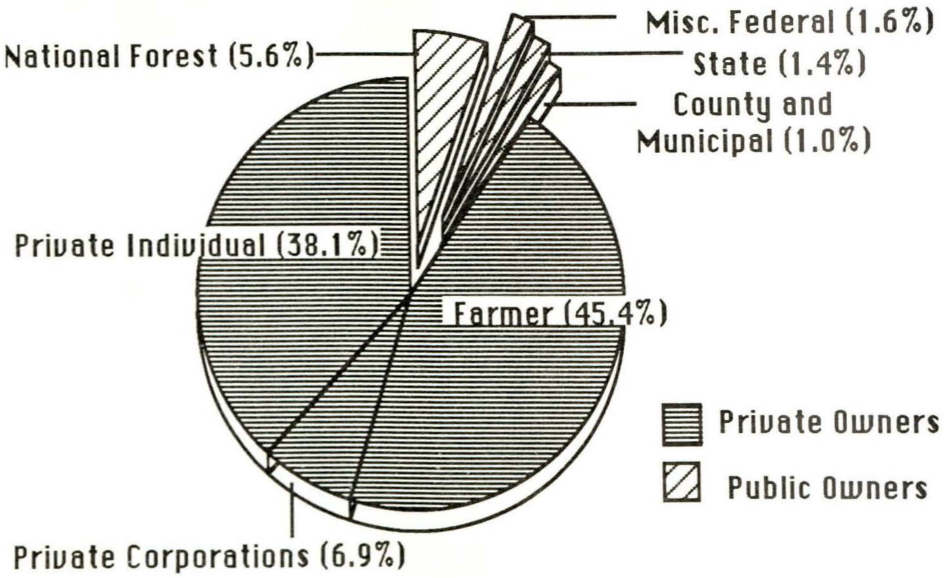


Figure 2.—*Percent of timberland area by owner class, Illinois, 1985.*

and county and municipal governments own 11 percent (41,800 acres).

Most (287,900 acres or 74 percent) publicly owned timberland is in the Southern Unit. The largest contiguous blocks (225,800 acres, or 58 percent of all publicly owned timberland in the State) are contained in the Shawnee National Forest. The Claypan and Prairie Units, respectively, contain 9 percent (36,600 acres) and 16 percent (64,100 acres) of the publicly owned timberland. Unlike the Southern and Claypan Units where federal and State agencies own much of the publicly owned timberland area, county and municipal governments own a greater share of this land in the Prairie Unit.

Forest industry owners

Forest industry holdings in Illinois total 13,000 acres (included in private corporate in fig. 2). Thirty-nine percent (5,100 acres) of the timberland area owned by forest industry is in the Southern Unit. The remaining 7,900 acres is about evenly split between the Claypan and Prairie Units. In the Southern and Claypan Units, forest industry timberland is owned by companies with holdings from 501 to 2,500 acres. In the Prairie Unit, industry holdings are smaller—101 to 500 acres.

Forest Type

Oak-hickory is the dominant forest type in Illinois; half the State's timberland area is in oak-hickory stands (2.0 million acres). Maple-beech (26 percent) and elm-ash-soft maple (17 percent) are the other types with large areas. Clearly, timberland area in Illinois consists predominately of hardwood stands.

The composition of the hardwood forest in Illinois has changed since 1962. The oak-hickory forest type declined 12 percent (275,500 acres) between 1962 and 1985. Area in oak-hickory stands decreased in the Southern and Claypan Units by a total of 301,500 acres but increased in the Prairie Unit by 26,000 acres. Some of the decline in oak-hickory area is due to maple in the understory taking over the site as the oak-hickory matured or was removed.

Area in elm-ash-soft maple stands also declined between inventories. In 1962 elm-ash-soft maple occupied 1.5 million acres. In 1985 the elm-ash-soft maple stand area had declined to 685,800 acres—a 54 percent decrease. The magnitude of the loss was about the same throughout Inventory Units. Bottomland being converted to agriculture and mortality caused by Dutch elm disease were the major reasons for the decline.

Maple-beech timberland area increased from 2 percent (85,000 acres) of the timberland area in 1962 to 26 percent (1,046,400 acres) in 1985. Maple-beech stands are most extensive in the Prairie Unit where they increased from 5 percent of timberland area in 1962 to 33 percent in 1985. In the Claypan and Southern Units, maple-beech stands were less than 1 percent of timberland area in 1962 but by 1985 had increased to 20 and 21 percent, respectively. Much of the maple-beech stands came into being because of the shade-tolerance and longevity of species associated with the type. These species formed part of the understory of other forest types and have begun to emerge as a more dominant forest type through the process of plant succession. The substantial increase in maple-beech stand area in Illinois appears to be similar to what is occurring in other North Central States where sugar maple, a climax species, is becoming more dominant. For example, in Michigan and Wisconsin maple-birch stand area increased 900,000 and 500,000 acres, respectively, between their most recent inventories.

Other forest types increasing in area are white pine, loblolly-shortleaf pine, oak-pine, and oak-gum-cypress. The following tabulation shows changes in forest types between inventories:

Forest type	Timberland area	
	1962	1985
	(Thousand acres)	
White pine	0.4	20.2
Loblolly-shortleaf pine	31.9	45.5
Oak-pine	11.4	13.3
Oak-hickory	2,300.5	2,025.0
Oak-gum-cypress	16.7	137.8
Elm-ash-soft maple	1,482.3	685.8
Cottonwood	——	34.8
Maple-beech	85.0	1,046.4
Aspen-birch	9.1	——
Nonstocked	43.2	21.1
All types	3,980.5	4,029.9

Stand age

Forest stands more than 50 years of age occupy 58 percent of Illinois' timberland area (fig. 3). The

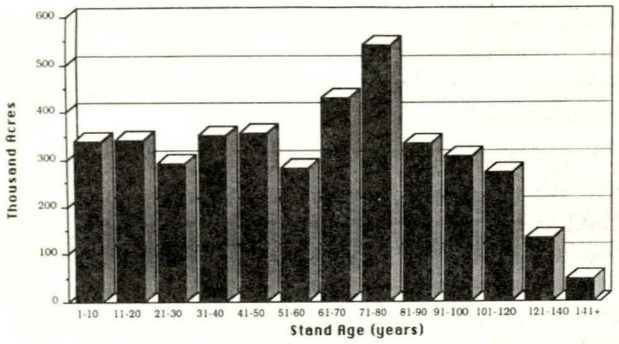


Figure 3.—*Area of timberland by stand-age class, Illinois, 1985.*

distribution of age by forest type differs. In the oak-hickory type 55 percent of the acreage is in stands more than 70 years old. By comparison, 58 percent of the maple-beech type acreage is in stands 50 years old and younger.

Site index

Site index provides a perspective of timberland site quality by classing forest land in terms of the height growth made by dominant and codominant trees of selected species at 50 years of age. Eighty-three percent of the State's timberland area (3,357,700 acres) grows trees taller than 61 feet at age 50, and 13 percent grows trees taller than 91 feet at age 50 years. The weighted average site index for all types in Illinois is 73.8 feet. Among the three major forest types the highest weighted average is 79.7 feet for the elm-ash-soft maple type, followed by maple-beech (75.6 feet) and oak-hickory (71.0 feet).

Site class

The quality of a forest site also can be judged by site class. Site class describes timberland in terms of its inherent capacity to grow wood based on the culmination of mean annual increment for fully stocked natural stands. (Culmination of mean annual increment is the point at which a curve plotting current increment crosses a curve plotting mean annual increment.) A stand's site class value is the cubic feet of growth per acre per year the site is capable of producing. The weighted average site class for Illinois is 80 cubic feet of growth per acre per year. Among the three major forest types in Illinois the highest average is 93.6 cubic feet per acre per year for the elm-ash-soft maple type, followed by oak-hickory (78.2 cubic feet) and maple-beech (73.7 cubic feet).

Stand-size classes

Sawtimber stands occupy the majority of timberland area in Illinois—64 percent (2.6 million acres) of timberland area is in sawtimber-size stands. Poletimber stands occupy 19 percent (773,700 acres) of the State's timberland area, and sapling and seedling stands occupy the remaining 17 percent (673,800 acres). Less than 1 percent (21,100 acres) of the State's timberland was nonstocked. In the oak-hickory forest type 72 percent of the stands are sawtimber size; 47 percent of the stands in the maple-beech type are sawtimber size.

Physiographic conditions of stand sites

Soil and water conditions of a site, described by physiographic classes, affect its ability to grow trees. Five physiographic conditions occur in Illinois. They range from xeric sites, where excessive drainage limits tree growth and species occurrence, to hydric sites, where excess water is the limiting factor (table 2). More than three-fourths (79 percent) of Illinois' timberland area occurs on mesic sites, where conditions are most favorable for growth of most species. Nearly all (95 percent) of the oak-hickory type and 91 percent of the maple-beech type occurs on mesic sites. The elm-ash-soft maple type occurs

Table 2.--Area of timberland by forest type and physiographic class, Illinois, 1985

(In thousand acres)

Forest type	All classes	Physiographic class				
		Hydric	Hydromesic	Mesic	Xeromesic	Xeric
White pine	20.2	--	--	16.7	3.5	--
Loblolly-shortleaf pine	45.5	--	--	38.6	6.9	--
Oak-pine	13.3	--	0.8	11.6	0.9	--
Oak-hickory	2,025.0	5.7	7.1	1,919.0	93.2	--
Oak-gum-cypress	137.8	4.0	53.2	80.6	--	--
Elm-ash-soft maple	685.8	18.8	514.0	153.0	--	--
Cottonwood	34.8	7.1	10.2	15.2	2.3	--
Maple-beech	1,046.4	--	83.5	947.4	10.9	4.6
Nonstocked	21.1	--	6.5	14.6	--	--
All types	4,029.9	35.6	675.3	3,196.7	117.7	4.6

on wetter sites along streams and rivers. Three-fourths of the timberland acreage (514,000 acres) in the elm-ash-soft maple type occurs on hydromesic sites.

Distance to roads

Most stands in Illinois can be easily reached from maintained roads. Sixty percent of the timberland stands are within one-fourth mile of a maintained road (one graded at least once a year), and most are within 1 mile of a maintained road:

Distance to road (Miles)	Area of timberland (Thousand acres)	(Percent)
0-1/8	1,248.4	31
1/8-1/4	1,152.6	29
1/4-1	1,607.9	40
1-2.5	17.0	--
2.5-5	4.0	--
Total	4,029.9	100

The ease of access by motorized vehicles may influence use of timberland, particularly for recreational and residential purposes. The 4,000 acres more than 2.5 miles from maintained roads are in the Prairie Unit.

Distance to water

Most timberland stands are located close to water bodies. Fifty-four percent of timberland stands are within one-fourth mile of open water—a river, stream, lake, farm pond, or swamp. Another 30 percent is between one-fourth and 1 mile of open water:

Distance to water (Miles)	Area of timberland (Thousand acres)	(Percent)
0-1/8	1,628.4	40
1/8-1/4	554.6	14
1/4-1	1,208.1	30
1-2.5	452.5	11
2.5-5	176.5	4
5-10	9.8	--
Total	4,029.9	100

In many cases timberland is located adjacent to rivers and streams because those areas are not suitable for agriculture. However, the forest-water interface is important for wildlife and is often a desirable environment for recreation. Also, the proximity of water to timberland stands indicates how valuable these stands are for protecting watersheds.

Management Activities on Timberland

Knowledge of past conditions of stands is useful for assessing management and other activities taking place on the stand. During the resource inventory process, field plots are surveyed to ascertain both the human-caused and natural activities or processes that have caused stand conditions to change between inventory periods. Between 1962 and 1985, 84 percent of the timberland area (3.4 million acres) was undisturbed by human activities and suffered no major damage (table 3).

Timber management is not the immediate goal of most owners. It appears that forest land is more im-

Table 3.--Area of timberland by treatment or damage class and ownership class, Illinois, 1985

(In thousand acres)

Treatment or damage class, 1962 to 1985	All owners	Ownership class: National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. priv.-corp.	Misc. priv.-indiv.
No disturbance	3,399.5	193.6	66.3	40.9	37.8	6.8	1,542.1	217.3	1,294.7
Timber stand improvement	32.0	--	--	3.5	--	2.3	15.0	--	11.2
Harvest, clearcut	21.9	0.9	--	--	--	--	9.3	6.9	4.8
Harvest, partial cut	298.0	9.7	--	--	4.0	3.9	166.0	20.9	93.5
Damage, natural	73.9	3.3	--	7.5	--	--	17.8	4.0	41.3
Damage, man caused	92.4	1.8	--	--	--	--	60.3	--	30.3
Artificial regeneration of forest land	10.8	1.2	--	--	--	--	4.8	--	4.8
Artificial regeneration of nonforest land	16.4	14.1	--	--	--	--	--	2.3	--
Natural regeneration of nonforest land	85.0	1.2	--	2.8	--	--	12.7	11.7	56.6
All treatments	4,029.9	225.8	66.3	54.7	41.8	13.0	1,828.0	263.1	1,537.2

portant to them for other values, especially noncommodity values. Providing wildlife habitat, preserving natural beauty, and providing a heritage to pass to future generations are the three most important reasons given by a sample of Illinois nonindustrial forest landowners for owning forest land (Young *et al.* 1985). Of nine reasons, income from the sale of timber is the least important reason for owning forest land. It is clear that most of the nonindustrial private owners of timberland are individuals and groups who have a wide range of reasons for owning forest land, and it is likely these reasons are unrelated to the production and sale of wood products. Also, some land owned by farmers is probably not actively managed for timber production because it is awaiting opportunities in agriculture or because the land is not suitable for row crops.

In the southern portion of the State where agriculture is less dominant, more of the timberland is managed for timber production. Some of the timberland area in Illinois is managed to facilitate recreation activities. In southern Illinois, the larger concentration of timberland areas are important tourism and recreation attractions. For example, the Shawnee National Forest, where 95 percent of the forest is available for recreation (Callahan *et al.* 1974), has an active forest recreation management program.

Timber was harvested on 319,900 acres, or 8 percent of the timberland area. Most (298,000 acres or 93 percent) was harvested in partial cuttings, and the remaining (21,900 acres or 7 percent) was clearcut. Harvesting was confined mostly to timberland owned by farmers and miscellaneous private individuals. Farmers harvested timber from 175,300 acres, and miscellaneous private individuals harvested timber from 98,300 acres. These two ownership classes combined owned 86 percent of all harvested timberland area in Illinois. Nine percent (27,800 acres) of the harvested area was owned by miscellaneous corporations, and 5 percent (14,600 acres) was publicly owned. Forest industry harvested 3,900 acres, or 30 percent of the timberland area they owned; a far greater share than other timberland owners in Illinois. Most (60 percent) of the harvested area is located in the two southern Units.

Timber stand improvement and artificial regeneration were carried out on 42,800 acres, or 1 percent of the timberland area in the State. Eight of every 10 acres where these silvicultural practices were employed are owned by farmers or miscellaneous private individuals. Nonforest land was converted to timberland through artificial and natural regeneration on 101,400 acres. Most (84 percent) of that conversion was through natural regeneration and on land owned by miscellaneous private individuals (56,600 acres), farmers (12,700 acres), miscellaneous corporations (11,700 acres), and the public (4,000 acres). The nonforest land that was converted to timberland through artificial regeneration totaled 16,400 acres. Most of this acreage was on the Shawnee National Forest where 14,100 acres of nonforest land were converted to timberland through artificial regeneration.

Timberland resources were damaged on 166,300 acres, or 4 percent of the timberland area. Most (56 percent or 92,400 acres) of the damaged area resulted from human activities such as spraying, draining, or flooding. Natural causes, such as disease, wind, fire, or insects, damaged the remaining 73,900 acres.

Plantation area

Forest plantations in Illinois are not extensive and are predominately in two forest types. Only 58,700 acres, or 1 percent, of the timberland area in the State is in forest plantations. More than half (57 percent or 33,600 acres) of that area is in the loblolly-shortleaf pine forest type. Slightly more than a third (34 percent or 20,200 acres) is in the white pine forest type. More than three-fourths (71 percent or 41,400 acres) of the plantation area was planted between 1955 and 1985, making them 30 years old or less. Since 1975, only 2,300 acres were planted; all of that is in the maple-beech forest type.

Most (71 percent) of the timberland area in plantations is in the Southern Unit. All of the plantation area in loblolly-shortleaf pine is in this Unit. The Prairie Unit has 15,100 acres in plantations, and all of this is in white pine forest type. In the Claypan Unit, only 2,000 acres are in plantations, and they are in the white pine forest type.

Reserved Timberland Resources

Reserved timberland area expanded from 44,900 acres in 1962 to 235,600 in 1985—a 425 percent increase. The magnitude of the increase was greater than other increases in forest land uses and was an average annual gain of 8,291 acres between 1962 and 1985. The residents of Illinois made the decision that forests are important resources and some should be reserved for uses other than timber production.

Two-thirds of the reserved timberland is located in the Prairie Unit. The Chicago metropolitan area, primarily Cook County, contains scattered tracts of reserved timberland totaling 43,600 acres. The Cook County Forest Preserves offer millions of urban residents the opportunity to have forest experiences. Other tracts of reserved timberland area

in the Prairie Unit are located in State Parks and Conservation Areas, many located in the Illinois River Valley. Numerous tracts of reserved timberland areas are scattered throughout the Claypan and Southern Units. Most are associated with water resources, principally the Mississippi and Ohio Rivers and various lakes.

Nonforest Land with Trees

For inventory purposes, some land that grows trees is classified as nonforest land with trees. To be so classified, an area must contain at least one tree per acre that is at least 5 inches in diameter at breast height (d.b.h.). Such areas amount to 900,800 acres in Illinois. Wooded strips, forest land that would qualify as timberland except that it is less than 120 feet wide, are the largest portion of this area:

Nonforest land with trees	Area of nonforest land with trees (Thousand acres)
Wooded strips	178.5
Wooded pastures	162.4
Urban and other	139.5
Windbreaks	133.1
Improved pasture	103.6
Urban forest	102.8
Cropland	53.5
Marsh	19.3
Idle farmland	8.1
Total	900.8

In general, nonforest land with trees offers little opportunity for management and harvest. Their greatest value probably lies in their static utility for erosion control, shading of livestock, and other agriculture-related purposes. Also, nonforest lands with trees produce fuelwood, are prime small game production/shelter areas, and provide recreational opportunities and values to the landowners and others because of the intrinsic aesthetic character of trees.

TIMBER VOLUME

Timber Volume Increased 40 Percent Since Last Inventory

Growing-stock volume on timberland in Illinois increased 40 percent between 1962 and 1985. The surplus of growth over removals between inventories is the cause of these building inventory volumes. The volume of softwood increased 367 percent between surveys, compared with an increase of 38 percent for hardwoods:

Species	Growing-stock volume	
	1962	1985
	(Million cubic feet)	
Softwoods	25	117
Hardwoods	3,417	4,718
All species	3,442	4,835

However, softwoods only account for 2 percent of the 1985 inventory; therefore, the significant volume increase was in the hardwoods. Oak species are 43 percent of the total hardwood volume and account for 46 percent of growing-stock volume increase. The oaks as a group are valuable to forest industry in the State. This is reflected in the fact that 54 percent of the growing-stock removals are oak.

In 1962, the select white oak species group led all other species groups in growing-stock volume with 18 percent of the total inventory. This was still true in 1985. Also maintaining its number two position was the other red oak group, with 15 percent of total growing-stock volume. However, in 1962, elm was third in growing-stock volume with 11 percent of total inventory; in 1985 elm was sixth with less than 6 percent. In 1985, the third position was held by soft maple. The continuing decimation of elm by the Dutch elm disease caused the reordering of volume rankings.

The distribution of elm trees in the State by diameter class illustrates the fact that large elms are most susceptible to Dutch elm disease. Elm is the most common species in the State in trees less than 9.0 inches in diameter.

In terms of volume per acre, the distribution of growing stock on timberland is fairly uniform, with the lowest volumes per acre confined to the Prairie Unit (fig. 4). The Prairie Unit, with an average 1,132 cubic feet per acre, is below the Statewide average of 1,200 cubic feet per acre. The Southern and Claypan Units are above the State average, with 1,254 and 1,245 cubic feet per acre, respectively. The State's lowest volume per acre is found in the Prairie Unit's Lake County; the highest value is in the Southern Unit's Massac County.

The distribution of sawtimber volume by species group shows some interesting differences among Survey Units. While the Prairie Unit has 41 percent of the State's total sawtimber volume, the Unit has 50 percent of the State's select white oak, 55 percent of the black walnut, and 60 percent of the

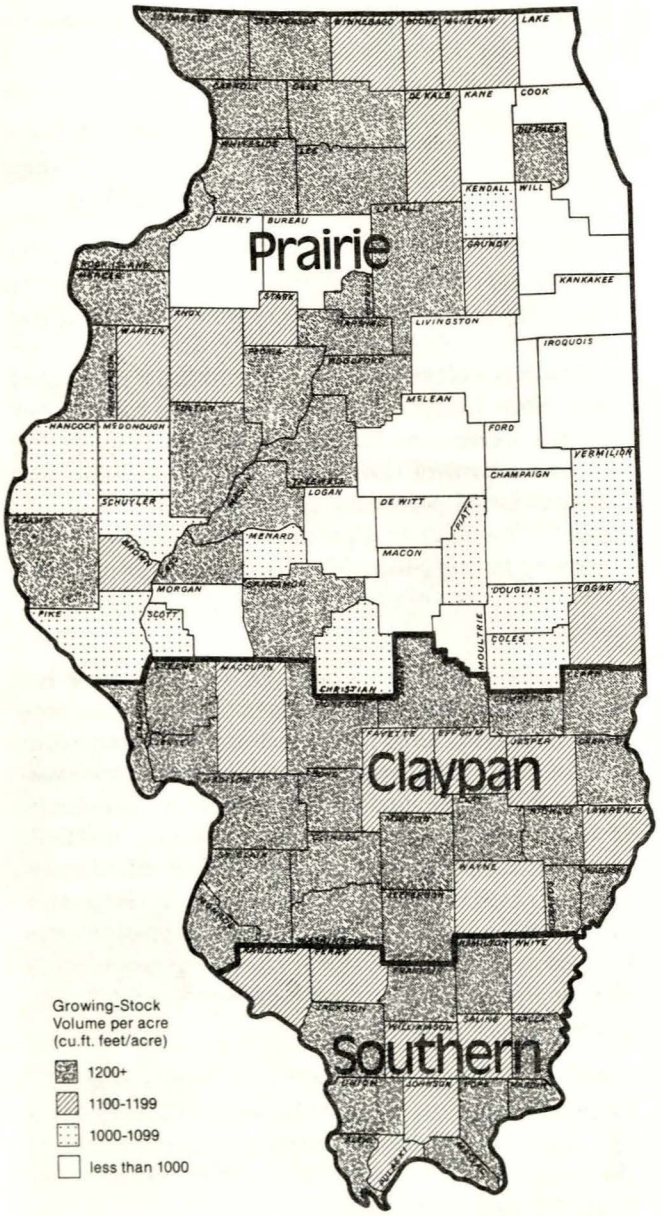


Figure 4.—*Growing-stock volume per acre of timberland by county, Illinois, 1985.*

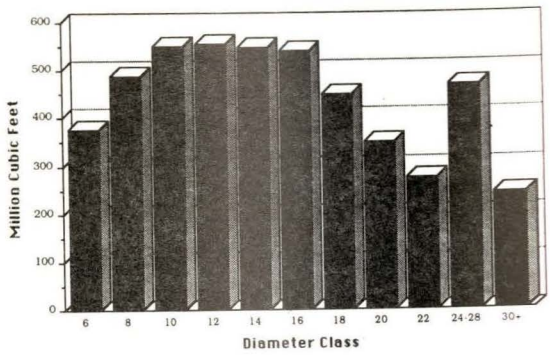


Figure 5.—*Growing-stock volume by diameter class, Illinois, 1985.*

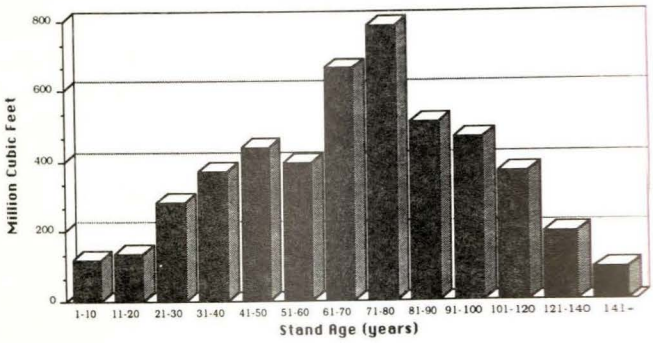


Figure 6.—*Growing-stock volume by stand-age class, Illinois, 1985.*

black cherry sawtimber volume. The Southern Unit, with 26 percent of the State's sawtimber volume, has 71 percent of all softwood sawtimber volume.

Forty-five percent of growing-stock volume is uniformly distributed among trees between 9 and 17 inches d.b.h. (fig. 5). This distribution of volume is a result of the stand age structure. Sixty-four percent of growing-stock volume is in stands more than 60 years old (fig. 6). These stands originated before 1925. The largest volume is in stands originating between 1905 and 1914. Harvesting and intensified forest management could increase the quality and growth rates of these older stands.

Private Parties Own 88 Percent of Volume

Farmers own 2.1 billion cubic feet of growing-stock volume, 43 percent of the total; private corporations (including forest industry) and individuals own 2.2 billion cubic feet, 45 percent of the total (fig. 7). Together, private owners control 88 percent of the State's timber volume.

Public agencies account for 0.6 billion cubic feet of the growing-stock volume. The State of Illinois owns 85 million cubic feet and the Shawnee National Forest contains 304 million cubic feet. County and municipal agencies and miscellaneous federal agencies combined make up the remaining 189 million cubic feet.

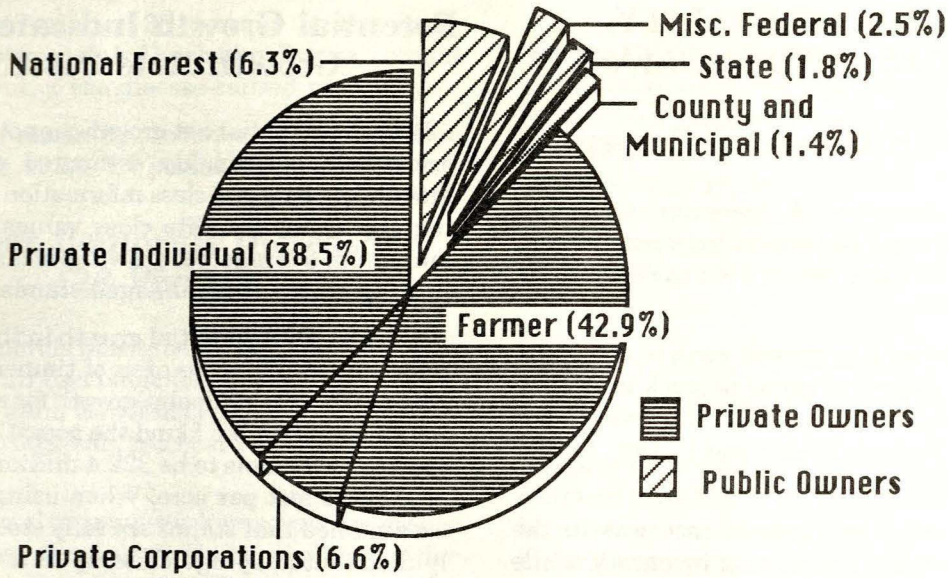


Figure 7.—*Percent of growing-stock volume by owner class, Illinois, 1985.*

Average volume per acre on timberland is 1,200 cubic feet in 1985, compared to 865 cubic feet in 1962. The average volume per acre for private owners is 1,169 cubic feet, while public owners average 1,488 cubic feet per acre.

Less Than One-third of Sawtimber Volume in Better Grades

The total volume in sawtimber trees was estimated by tree grade based on the sample tree volumes. Only 28 percent of the sawtimber volume is in the better log grades 1 and 2. (See Log Grade section in the Appendix for an explanation of individual log grades.) The species groups that have the highest proportion of their sawtimber volume in log grades 1 and 2 are butternut (60 percent) and sycamore (48 percent).

Nongrowing-Stock Volume Significant

In addition to the volume in growing-stock trees, volume in rough and rotten, short-log, and salvable dead trees add another 573 million cubic feet to the State's total, bringing total volume on timberland in Illinois to 5,408 million cubic feet (table 4).

The volume in short-log trees (commercial species that contain one merchantable 8- to 11-foot saw log but not a 12-foot saw log or two noncontiguous 8- to 11-foot saw logs) is 448 million board feet. This brings total sawtimber volume on timberland to 17,943 million board feet for the State.

Although cull and salvable dead trees take up space that could be used by more valuable growing-stock trees, they are valuable to wildlife. In addition, many of these trees can be used for timber products such as low-grade saw logs, bolts or fuelwood.

Table 4.--Net volume of timber on timberland by class of timber and softwoods and hardwoods, Illinois, 1985

(In million cubic feet)

Class of timber	All species	Softwoods	Hardwoods
Growing stock			
Sawtimber	3,440.5	62.1	3,378.4
Poletimber	1,394.6	55.4	1,339.2
Total	4,835.1	117.5	4,717.6
Cull			
Rough and rotten	365.0	2.9	362.1
Short-log	148.0	0.5	147.5
Total	513.0	3.4	509.6
Salvable dead	60.3	0.7	59.6
All classes	5,408.4	121.6	5,286.8

GROWTH, MORTALITY, REMOVALS, AND BIOMASS

Net Growth Down 23 Percent

Net annual growth of growing stock on timberland decreased 23 percent between surveys, from 125.0 million cubic feet in 1961 to 96.0 million cubic feet in 1984.

The average cubic foot growth rate in the State in 1984 was 2.0 percent of growing-stock inventory, compared to 3.6 percent in 1961. Net growth per acre decreased from 31.4 cubic feet in 1961 to 23.8 cubic feet in 1984.

The highest cubic foot growth rate was in the Southern Unit with 2.1 percent of inventory, while the Prairie Unit had the lowest rate at 1.9 percent. Among hardwood species groups with the highest cubic foot growth rates are hackberry (6.1 percent), black cherry (4.2 percent), and soft maple (4.1 percent).

Net annual growth represents growth and ingrowth less natural mortality. The total volume lost by the death of a single large tree cancels out the growth in many smaller diameter trees of the same species. Therefore, a species with large diameter trees subject to mortality has a lower net annual growth rate. For example, elm has a net annual growing-stock growth rate of −1.9 percent.

Net annual growth of sawtimber in 1984 amounted to 437.1 million board feet giving a growth rate of 2.5 percent of inventory. Sawtimber growth per acre averaged 108.5 board feet. The Prairie Unit accounts for 41 percent of the sawtimber volume but only 36 percent of net growth.

Potential Growth Indicates Higher Growth Rate Possible

Because potential net growth cannot be measured accurately, we roughly estimated potential net growth by using site class information collected during the inventory. Site class values indicate the maximum average net growth per acre obtainable in fully stocked, unmanaged stands.

We estimated potential growth in the State (table 5) by multiplying the area of timberland in each site class by the midpoint growth for each class. Using this method, we found the potential net annual growth for Illinois to be 322.4 million cubic feet or 80.0 cubic feet per acre. When using this method we assumed that stands are fully stocked and evenly distributed by age class up to rotation age for each forest type. Therefore, results cannot be directly compared to the current growth in Illinois of 23.8 cubic feet per acre per year. Still, this potential growth is not the ultimate growth possible. Volumes of growth higher than the potential growth could be attained by thinning, applying fertilizers, and using genetically superior stock.

Mortality Increased 123 Percent

Net annual mortality of growing-stock trees increased from 29.8 million cubic feet in 1961 to 66.6 million in 1984, a 123-percent gain. The mortality rate in 1984 was 1.4 percent of inventory, up from 0.9 percent in 1961.

The largest volume of mortality (45 percent of the total) was due to "unknown and other" causes. This is true because the field crews could not determine the *primary* cause of death in trees that had been dead for several years. Disease accounted for the

Table 5.--Estimation of potential net annual growth on timberland, Illinois, 1984

Site class	Area of timberland	Potential net growth per acre	Total potential net growth
Cu.ft./acre/year	M acres	Cu.ft./acre/year	Million cu.ft./year
120+	287.7	142.0	40.9
85-119	1,433.1	102.0	146.2
50-84	1,713.1	67.0	114.8
20-49	596.0	34.5	20.6
All classes	4,029.9	80.0	322.5

next largest volume, 38 percent of the total. Diseases of elm, mainly Dutch elm disease, account for 39 percent of the disease-caused mortality.

Sawtimber mortality amounted to 206.9 million board feet in 1984—1.2 percent of inventory.

Timber Removals Increased 128 Percent

Timber removals from growing stock jumped from 30.1 to 68.6 million cubic feet between surveys, a 128 percent gain. Sawtimber removals increased from 175.3 to 308.8 million board feet, a 76-percent increase.

Although total growing-stock removals are evenly divided among the Survey Units, removals differ among Units by species group. Thirty percent of the Prairie Unit's sawtimber removals are from select white oak. This species group makes up less than 13 percent of the removals in the other two survey units. Eighty-six percent of the softwood sawtimber removals are from the Southern Unit.

The volume of removals increased for most species between surveys but declined for basswood, soft maple, and cottonwood. Removals of basswood growing stock in 1984 were 55 percent lower than the 1961 volume.

Other red oak accounted for the largest volume of growing-stock removals in 1984 with 17.8 million cubic feet, compared to 5.5 million cubic feet in 1961. Removals of select white oak were the second largest with 12.6 million cubic feet.

The situation is similar for sawtimber removals, with other red oak accounting for 28 percent of sawtimber removals (85.3 million board feet) and select white oak in second place with 21 percent (66.2 million board feet).

Fifty-four percent of the growing-stock removals (36.7 million cubic feet) were harvested for roundwood products, primarily saw logs and fuelwood. Other removals (trees standing but not used for products, or trees left standing but "removed" from the commercial forest classification by land use change) amounted to 35 percent of the removals volume or 24.3 million cubic feet. Logging residue (unused trees killed by logging or the unused portion of cut trees) accounted for the remaining 11 percent of the removals volume or 7.6 million cubic feet.

Saw logs (25.1 million cubic feet) accounted for 68 percent of the volume of roundwood products from growing stock in 1984, and fuelwood (6.9 million cubic feet) accounted for 19 percent.

Sixty-one percent of the sawtimber removals volume (189.2 million board feet) was harvested for roundwood products. The proportion of saw and veneer logs cut from growing stock for products increased from 60 percent of total roundwood products in 1961 to 70 percent in 1984. The proportion of fuelwood cut from growing stock shifted from 6 percent of total roundwood products in 1961 to 19 percent in 1984.

Hardwood Growth Exceeds Removals

One way to evaluate the level of removals is to compare it with growth. However, caution is needed because the volume of growth contains growth from many trees too small to be part of the removals volume.

In 1984 growing-stock removals of 68.6 million cubic feet amounted to 71 percent of the volume of net annual growth (96.0 million cubic feet). Sawtimber removals of 308.8 million board feet also were 71 percent of net annual growth (437.1 million board feet).

Biomass

Because of the increased interest in whole-tree utilization, we estimated the above-ground weight of live trees in Illinois as part of the inventory. The total biomass of all live trees at least 1 inch in d.b.h. on timberland in the State amounts to 292.9 million green tons, an average of 73 tons per acre. The largest total biomass is in the oak-hickory forest type with 157.1 million green tons (78 tons per acre), but the greatest biomass per acre is in the oak-gum-cypress type with 89 tons per acre (12.2 million tons).

Seventy-seven percent of live tree biomass is located in growing-stock trees. Cull trees provide 13 percent of the State's biomass, and trees 1 to 5 inches in diameter add the remaining 10 percent:

Biomass component	Weight (Million green tons)	Percent
Growing-stock trees		
Stumps	12.7	4
Boles	116.4	57
Tops and limbs	48.0	16
Cull trees		
Stumps	2.2	1
Boles	27.2	9
Tops and limbs	7.8	3
1- to 5-inch trees	28.6	10
Total	292.9	100

PROJECTED TIMBER SUPPLY

The most recent projection of national demand for roundwood from United States forests is estimated at 22.2 billion cubic feet (USDA Forest Service 1980). National supplies (timber available from harvest) of roundwood are projected to increase from 12.1 to 18.7 billion cubic feet between 1976 and 2010. Projected demand on United States forests in 2010 exceeds supply by 3.5 billion cubic feet. Although Illinois' timber resource is small when viewed from a National perspective, the State's output of forest products plays a significant role in the supply-demand relation of many specialty products. Therefore, the possible effects of this increased demand on the State's forest resource should be studied.

To see what the future holds for Illinois' timber resource, we made two 30-year projections using the Timber Resource Analysis System (TRAS) program, a computer program for updating, backdating, and projecting timber resource information (Alig *et al.* 1982). The first projection assumes a continuation of recent levels of timber removals (low removals option), and the second assumes a higher level of removals (high removals option). TRAS uses a stand projection technique involving input of number of trees, growth rates, mortality rates, and removal rates, all by 2-inch diameter classes, along with assumed total removals by year and assumed ingrowth into the 2-inch diameter class.

Both options assume that (1) the area of timberland will not change; (2) radial growth will decline in relation to the increase of basal area per acre of trees; (3) the intensity of forest management will continue at the rate indicated by recent trends; and (4) the volume of "other" removals will drop during the period as more of these trees are utilized for products.

Low Removals Option Projection

The low option assumes that timber removals will increase 17 percent from 68.6 to 80.0 million cubic feet between 1984 and 2014 (fig. 8). Net growth is projected to decline from 96.0 million cubic feet in 1984 to 90.6 million cubic feet in 2015. Growing-stock inventory is projected to increase from 4,835 million cubic feet in 1985 to 5,350 million cubic feet by 2015. (The assumed average annual increase in removals used in the projections is shown in table 6).

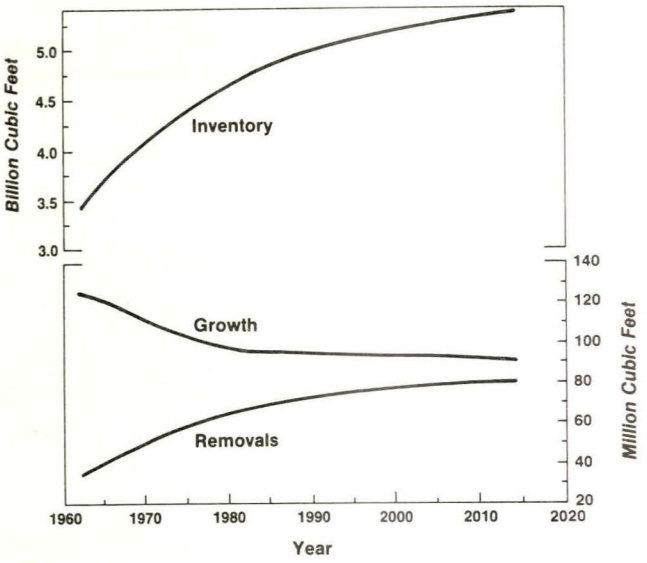


Figure 8.—*Removals, net growth, and inventory of growing stock in Illinois, 1962-1985, and low removals option projection for 1985-2015.*

High Removals Option Projection

Removals under this option reflect a higher level of harvesting than the previous option. Timber removals are projected to exceed growth by 2001, and inventory is projected to turn down at that time (fig. 9).

Timber removals jump from 68.6 million cubic feet in 1984 to 103.9 million cubic feet in 2015, a 46-percent gain. In this high option we assumed that forest products markets would be larger than those we assumed for the low option.

Table 6.--Projections of average annual change in removals, Illinois, 1985-2014

Period	Low removals option		High removals option	
	Soft-woods	Hard-woods	Soft-woods	Hard-woods
	Percent annual change			
1985-1989	1.2	0.9	3.3	2.4
1990-1994	1.1	0.7	2.8	1.9
1995-1999	1.0	0.5	2.4	1.5
2000-2004	0.9	0.4	2.0	1.1
2005-2009	0.8	0.3	1.7	0.8
2010-2014	0.6	0.2	1.4	0.5

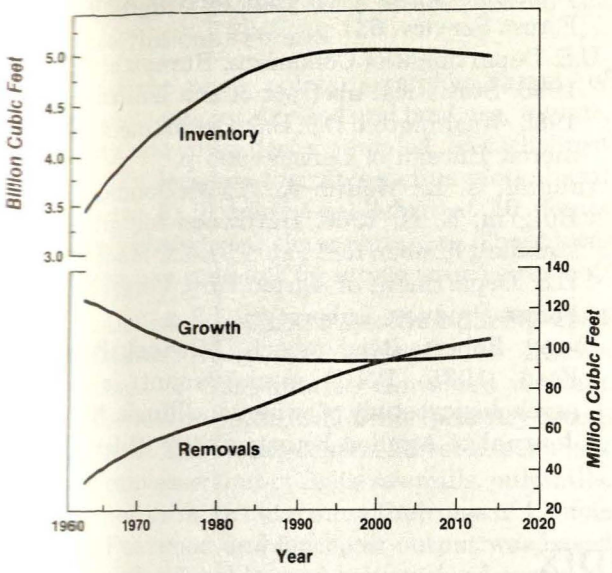


Figure 9.—*Removals, net growth, and inventory of growing stock in Illinois, 1962-1985, and high removals option projection for 1985-2015.*

Net growth is projected to decline from 96.0 million cubic feet in 1984 to 92.8 million in 2000 and then to increase to 95.3 million cubic feet by 2015. The excess of growth over removals in 1984, 27.4 million cubic feet, is projected to vanish completely in 2000 when the growth and removals curves intersect.

As a result of these growth and removals interactions, the growing-stock inventory is projected to peak in 2000 at 5,025 million cubic feet and then decline to 4,950 million cubic feet by 2015.

Timber Supply Likely to Increase

These projections represent reasonable bounds within which the actual future forest situation will develop. Inventories should increase between 2 and 11 percent by 2015; however, the low and high removals options are valid only to the extent that the assumptions upon which they are based are realized. Projections for the first decade are the most reliable because changing economic and social conditions may invalidate longer-range assumptions and reduce the value of projections beyond this decade. Also, economic development initiatives by the State could increase utilization of the resource.

These projections are not necessarily desirable goals from silvicultural, social, or economic perspectives. They are simply indicators of what is likely to happen if forests in the State are managed much as they have been for the past 23 years and if harvesting occurs at a "high" or a "low" level. In either case, inventory is projected to be higher in 2015 than today.

With high removals, a decline of inventory volume may lead to an increase in the growth rate as the average age of stands decreases. Even higher growth and larger inventories toward the end of the projection period are possible if timber management efforts are increased. More complete utilization of residues, tree tops, and limbs, the volumes of which are not included in growing-stock inventories, is desirable and would further extend wood supplies. The interest in fuelwood as an energy source suggests that this may be happening. Inventories could be smaller than projected if the area of timberland declines significantly.

Total output of fuelwood from roundwood increased 20 times since 1961, from 80,000 to 1.6 million cords in 1984. This increased utilization for fuelwood presents both an opportunity and a threat to improved forest management. If the lower quality trees are taken for fuelwood, a market incentive will be provided for using timber stand improvement techniques to release desirable growing-stock trees. On the other hand, if many of the best, young, growing-stock trees are removed for fuelwood, the future potential to produce quality saw logs will be greatly reduced. The key is proper forest management. The importance of fuelwood removals is stressed by the fact that 19 percent of all growing-stock removals for products are for fuelwood.

Because private individuals own 90 percent of the timberland area and 88 percent of the growing-stock volume, they control the future of the State's forest resource. Improving the forest resource requires that private owners practice sound forest management. Policies providing practical technical information and field assistance on timber sale preparation and administration along with forest management education will help to improve the forest resource. These owners might also be persuaded by policies that make timber-growing more profitable to them, such as efforts to expand markets for timber products and to increase financial incentives for performing needed management work.

LITERATURE CITED

Alig, Ralph J.; Brink, Glen E.; Goforth, Marcus H.; La Bau, Vernon J.; Mills, Thomas J. 1982. TRAS

1980—User's manual for an expanded version of the TRAS projection system. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 63 p.

Callahan, John; Higgins, Malcolm; Sammis, Richard; Smith, Robert. 1974. The midland area situation statement. East Lafayette, IN: Purdue University. 192 p.

Little, Elbert L., Jr. 1979. Checklist of United States trees (native and naturalized). Agric. Handb. 541. Washington, DC: U.S. Department of Agriculture. 375 p.

U.S. Department of Agriculture, Forest Service. 1980. An assessment of the forest and range land situation in the United States. FS-345. Washington, DC: U.S. Department of Agriculture, Forest Service. 631 p.

U.S. Department of Commerce, Bureau of Census. 1985. Statistical abstract of the United States, 1986. Washington, DC: U.S. Department of Commerce, Bureau of Census. 985 p.

Vaughn, C. L.; Wollin, A. C.; McDonald, K. A.; Bulgrin, E. H. 1966. Hardwood log grades for standard lumber. Res. Pap. FPL-62. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory. 52 p.

Young, Robert; Reichenbach, Michael; Perkuhn, Fred. 1985. PNIF management: a social-psychological study of owners in Illinois. Northern Journal of Applied Forestry. 2(3): 91-94.

APPENDIX

ACCURACY OF SURVEY

Forest Inventory and Analysis information is based on a sampling procedure designed to provide reliable statistics at the State and Survey Unit level. Consequently, the reported figures are estimates only. A measure of reliability of these figures is given by sampling errors. These sampling errors mean the chances are two out of three that the true inventory value is within the limits indicated.

For example, the estimated growing-stock volume in Illinois in 1985, 4,835.1 million cubic feet, has a sampling error of ±1.99 percent (±96.2 million cubic feet). Therefore, the growing-stock volume from a 100-percent inventory would have a two in three chance of falling between 4,738.9 and 4,931.3 million cubic feet.

The following tabulation shows the sampling errors for the 1985 Illinois inventory:

Item	State totals	Sampling error
Growing stock	(Million cubic feet)	(Percent)
Volume	4,835.1	1.99
Growth	96.0	3.36
Removals	68.6	9.20
Sawtimber	(Million board feet)	
Volume	17,494.6	2.50
Growth	437.1	5.27
Removals	308.8	5.88
Timberland area	(Thousand acres) 4,029.9	.94

As survey data are broken down into sections smaller than State or Survey Unit totals, the sampling error increases. The smaller the breakdown, the larger the sampling error. For example, the sampling error for growing-stock volume in a particular Unit or county is higher than that for total growing-stock volume in the State (table 98 shows the sampling errors for estimates smaller than State totals).

SURVEY PROCEDURES

We used a *two-phase* sampling design for the 1985 Illinois survey. The major steps in the survey design were as follows:

1. The *first phase* of the survey was to interpret aerial photos. In this phase, systematic random points were located on current aerial photographs. A total of 194,815 1-acre points were systematically distributed across aerial photos of the entire State, except the National Forests. These points were classified into land classes as shown below to make a preliminary estimate of forest area. Next, 32,672 of these points were stereoclassified as to stand-size class and density. In the *second phase*, 10,847 points were examined on the ground to correct the preliminary area estimate for errors in classification and for actual changes in land use since the photos were taken.

Land class	Photo points classified	Photo points stereoclassified	Inventory plots checked
Forest land	21,818	21,818	1,138
Unproductive/reserved forest land	1,363	1,363	71
Nonforest land	159,347	9,491	9,491
Water	2,287	0	147
Total	184,815	32,672	10,847

In addition, 110 plots were established on the Shawnee National Forest.

2. From the photo points, a random sample of ground plots was established and land use, volume, mortality, and cutting were recorded. At each forest ground plot location, variable-radius plots (basal area factor 37.5) were established at 10 points uniformly placed over the sample acre. These locations were monumented for future remeasurement.

3. Statistics on timber utilization during 1981 were obtained from mill surveys. The Illinois Department of Conservation canvassed resident sawmills, veneer mills, and other primary wood-using plants. The North Central Forest Experiment Station canvassed out-of-State sawmills, pulpmills, and veneer mills to determine their use of Illinois timber. Fuelwood and fencepost output was based on a sample of public and private landowners to determine their production of fuelwood and fenceposts. Estimates of primary mill residue used for fuelwood were obtained from the canvass of Illinois primary wood-using plants.

4. A total of 226 felled trees on 52 active logging operations were measured throughout the State during 1984-1985 to develop wood utilization factors for converting timber products output to timber removals for saw logs and pulpwood. Factors for all other products were obtained during the 1966-1967 Illinois utilization study.

5. Field data were sent to St. Paul, Minnesota, to be processed and analyzed.

COMPARING ILLINOIS' THIRD INVENTORY WITH THE SECOND INVENTORY

Data from new forest inventories are often compared with data from earlier inventories to determine trends in forest resources. However, changes in procedures and definitions between surveys often make it necessary to adjust earlier survey data so that they are comparable to data from the new survey. A consistency check was made for each unit to ensure that the changes observed between inventories reflect actual changes in the resource and not changes in definitions or procedures.

Between the 1962 and 1985 inventories of Illinois, some procedural changes were made in the method of deriving annual mortality estimates, computing volume, and determining forest type.

Mortality figures for the 1962 inventory were based on field estimates from nonremeasurement plots. Information gathered on remeasurement plots during the current inventory was used to adjust the 1962 mortality figures. This adjustment also changed the estimate of net growth for the 1962 inventory. Ownership class definitions also changed between the two inventories. A new definition of farm ownership shifted area reported in 1962 as farmer to the miscellaneous private ownership class in this report.

A test was made to ensure that it was possible to move from the 1962 resource statistics to the 1985 values by means of a computer program using growth rates, mortality rates, and removals rates for the period between the two surveys to project the inventory from 1962 to 1985. Thus, any inconsistencies in volume, growth, mortality, and removals were identified and resolved.

One factor in the consistency check was the acres of timberland that were classified nonforest with trees in 1962 (mainly wooded pasture). These acres added an average of 12 million cubic feet per year to the growing stock inventory between 1962 and 1985.

In addition, an estimate is made of what total removals had to be for the inventory to have changed as it did between surveys, given the volume, growth, and mortality data. Estimates of removals for products and logging residues, two of the three components of total timber removals, were made from an independent utilization study. An estimate of "other" removals (see definition of terms in appendix), the third component of total removals, was made by subtracting the first two removals components from the total removals estimate. This estimate of "other" removals was compared with findings from stump counts and land use change to check its validity.

LOG GRADE

In Illinois, the butt log of sawtimber trees on 279 ground plots were graded for quality. Logs were graded on the basis of external characteristics. Hardwood species were graded according to "Hardwood Log Grades for Standard Lumber" (Vaughn *et al.* 1966). The best 12-foot section of the lowest 16-foot hardwood log, or the best 12-foot upper section if the butt log did not meet minimum log-grade standards, was graded as follows:

Forest Service standard grades for hardwood factory saw logs

Grading factors		Specifications							
		Log grade 1			Log grade 2				Log grade 3
Position in tree		Butts only	Butts and uppers		Butts and uppers				Butts and uppers
Scaling diameter, inches		[1]13-15	16-19	20 +	[2]11 +	12 +			8 +
Length without trim, feet			10 +		10 +	8-9	10-11	12 +	8 +
Required clear cuttings[3] of each of three best faces[4]	Min. length, feet	7	5	3	3	3	3	3	2
	Max. number	2	2	2	2	2	2	3	No Limit
	Min. proportion of log length required in clear cutting	5/6	5/6	5/6	2/3	3/4	2/3	2/3	1/2
Maximum sweep and crook allowance	For logs with less than one-fourth of end in sound defects		15 percent			30 percent			50 percent
	For logs with more than one-fourth of end in sound defects		10 percent			20 percent			35 percent
Maximum scaling deduction			40 percent[5]			50 percent[6]			50 percent

[1]Ash and basswood butts can be 12 inches if they otherwise meet requirements for small #1's.
[2]Ten-inch logs of all species can be #2's if they otherwise meet requirements for small #1's.
[3]A clear cutting is a portion of a face, extending the width of the face, that is free of defects.
[4]A face is one-fourth of the surface of the log as divided lengthwise.
[5]Otherwise #1 logs with 41-60 percent deductions can be #2.
[6]Otherwise #2 logs with 51-60 percent deductions can be #3.

Forest Service standard specifications for hardwood construction logs (tie and timber logs)

Position in tree		Butt and upper
Min. diameter, small end		8 inches +
Min. length, without trim		8 feet
Clear cuttings		No requirements.
Sweep allowance, absolute		One-fourth of the diameter at the small end for each 8 feet of length.
Sound surface defects	Single knots	Any number, if no one knot has an average diameter above the callus in excess of one-third of the log diameter at point of occurrence.
	Whorled knots	Any number if sum of knot diameters above the callus does not exceed one-third of the log diameter at point of occurrence.
	Holes	Any number provided none has a diameter over one-third of the log diameter at point of occurrence, and none extends more than 3 inches into included timber.[2]
Unsound surface defects		Same requirements as for sound defects if they extend into included timber.[2] No limit if they do not.
End defects	Sound	No requirements.
	Unsound	None allowed; log must be sound internally, but will admit one shake not to exceed one-fourth the scaling diameter and will admit a longitudinal split not extending more than 5 inches into the contained timber.

[1]These specifications are minimum for the class. If, from a group of logs, factory logs are selected first, thus leaving only non-factory logs from which to select construction logs, then the quality range of the construction logs so selected is limited, and the class may be considered a grade. If selection of construction logs is given first priority, then it may be necessary to subdivide the class into grades.

[2]Included timber is always square, and dimension is judged from small end.

Softwood species were graded according to the following specifications:

Log Graded for Softwood Logs

Grade 1

1. Logs must be 16 inches or larger, 10 feet or longer, and with deduction for defect not more than 30 percent of gross scale.
2. Logs must be at least 75 percent clear on each of three faces.
3. All knots outside clear cutting must be sound and not more than 2-1/2 inches in diameter.

Grade 2

1. Logs must be 12 inches or larger, 10 feet or longer, and with a net scale after deduction for defect of at least 50 percent of the gross contents of the log.
2. Logs must be at least 50 percent clear on each of three faces or 75 percent lear on two faces.

Grade 3

Logs must be 6 inches or larger, 8 feet or longer, and with a net scale after deduction for defect of at least 50 percent of the gross contents of the log.

Note: (A) Diameters are diameter inside bark at small end of log.
(B) Percent clear refers to percent clear in one continuous section.

METRIC EQUIVALENTS OF UNITS USED IN THIS REPORT

1 acre = 4,046.86 square meters or 0.405 hectare.
1,000 acres = 405 hectares.
1 cubic foot = 0.0283 cubic meter.
1 mile = 1.61 kilometers.
1 foot = 30.48 centimeters or 0.3048 meter
1 inch = 25.4 millimeters, 2.54 centimeters, or 0.0254 meter.

Tree Species Groups in Illinois[1]

Softwoods
- Jack pine . . . . . *Pinus banksiana*
- Red pine . . . . . *Pinus resinosa*
- White pine . . . . . *Pinus strobus*
- Loblolly pine . . . . . *Pinus taeda*
- Shortleaf pine . . . . . *Pinus echinata*
- Baldcypress . . . . . *Taxodium distichum*
- Eastern redcedar . . . . . *Juniperus virginiana*
- Other softwoods
  - Scotch pine . . . . . *Pinus sylvestris*

Hardwoods
- Select white oak
  - White oak[2] . . . . . *Quercus alba*
  - Swamp white oak[2] . . . . . *Quercus bicolor*
  - Bur oak[2] . . . . . *Quercus macrocarpa*
  - Swamp chestnut oak[2] . . . *Quercus michauxii*
  - Chinkapin oak[2] . . . . *Quercus muehlenbergii*
- Other white oak
  - Overcup oak[2] . . . . . *Quercus lyrata*
  - Chestnut oak[2] . . . . . *Quercus prinus*
  - Post oak[2] . . . . . *Quercus stellata*
- Select red oak
  - Cherrybark oak[2] . . . . . *Quercus falcata* var. *pagodifolia*
  - Northern red oak[2] . . . . . *Quercus rubra*
- Other red oaks
  - Scarlet oak[2] . . . . . *Quercus coccinea*
  - Northern pin oak[2] . . . . *Quercus ellipsoidalis*
  - Southern red oak[2] . . . . . *Quercus falcata*
  - Shingle oak[2] . . . . . *Quercus imbricaria*
  - Black oak[2] . . . . . *Quercus velutina*
  - Blackjack oak[2] . . . . . *Quercus marilandica*
  - Pin oak[2] . . . . . *Quercus palustris*
- Select hickory
  - Pecan[2] . . . . . *Carya illinoensis*
  - Shellbark hickory[2] . . . . . *Carya laciniosa*
  - Shagbark hickory[2] . . . . . *Carya ovata*
  - Mockernut hickory[2] . . . . . *Carya tomentosa*
- Other hickory
  - Bitternut hickory[2] . . . . . *Carya cordiformis*
  - Pignut hickory[2] . . . . . *Carya glabra*
- Basswood
  - American basswood[3] . . . . . *Tilia americana*
  - White basswood[3] . . . . . *Tilia heterophylla*
- Beech[2] . . . . . *Fagus grandifolia*
- Hard maple
  - Black maple[2] . . . . . *Acer nigra*
  - Sugar maple[2] . . . . . *Acer saccharum*
- Soft maple
  - Red maple[3] . . . . . *Acer rubrum*
  - Silver maple[3] . . . . . *Acer saccharinum*

[1] *The common and scientific names are based on: Little, Elbert L. 1979. Checklist of native and naturalized trees of the United States. Agric. Handb. 541. Washington, DC: U.S. Department of Agriculture, Forest Service. 375 p.*

[2] *This species is considered a hard hardwood, with an average specific gravity greater than 0.50.*

[3] *This species is considered a soft hardwood, with an average specific gravity of 0.50 or less.*

Elm
- Winged elm[3] ..... *Ulmus alata*
- American elm[3] ..... *Ulmus americana*
- Siberian elm[3] ..... *Ulmus pumila*
- Slippery elm[3] ..... *Ulmus rubra*

Black ash
- Black ash[3] ..... *Fraxinus nigra*
- Blue ash[2] ..... *Fraxinus quadrangulata*

White and green ash
- White ash[2] ..... *Fraxinus americana*
- Green ash[2] ..... *Fraxinus pennsylvanica*

Sycamore[3] ..... *Platanus occidentalis*
Cottonwood[3] ..... *Populus deltoides*
Willow
- Black willow[3] ..... *Salix nigra*

Hackberry[3] ..... *Celtis occidentalis*
Bigtooth aspen[3] ..... *Populus grandidentata*
Quaking aspen[3] ..... *Populus tremuloides*
River birch[2] ..... *Betula nigra*
Sweetgum[3] ..... *Liquidambar styraciflua*
Tupelo
- Black tupelo[3] . *Nyssa sylvatica* var. *sylvatica*
- Swamp tupelo[3] . *Nyssa sylvatica var.* biflora

Black cherry[3] ..... *Prunus serotina*
Black walnut[2] ..... *Juglans nigra*
Butternut[3] ..... *Juglans cinerea*
Yellow-poplar[3] ..... *Liriodendron tulipifera*
Other hardwoods
- Persimmon[2] ..... *Diospyros virginiana*
- Sassafras[3] ..... *Sassafras albidum*
- Ohio buckeye[3] ..... *Aesculus glabra*
- Boxelder[3] ..... *Acer negundo*
- Kentucky coffeetree[2] .. *Gymnocladus dioicus*
- Black locust[2] ..... *Robinia pseudoacacia*
- White mulberry[3] ..... *Morus alba*
- Red mulberry[3] ..... *Morus rubra*
- Flowering dogwood[2] ..... *Cornus florida*
- Honeylocust[2] ..... *Gleditsia triacanthos*
- Northern catalpa[3] ..... *Catalpa speciosa*
- Cucumbertree[3] ..... *Magnolia acuminata*

Noncommercial species
- Osage-orange ..... *Maclura pomifera*
- Eastern hophornbeam ... *Ostrya virginiana*
- Apple ..... *Malus* spp.
- American hornbeam . *Carpinus caroliniana*
- Wild plum ..... *Prunus* spp.
- Eastern redbud ..... *Cercis canadensis*
- Peachleaf willow ..... *Salix amygdaloides*
- Hawthorn ..... *Crategus* spp.

DEFINITION OF TERMS

Average annual removals from growing stock.—The average volume of sound wood in growing-stock trees removed annually for forest products (including roundwood products and logging residues) and for other uses (see definition of other removals). Average annual removals of growing stock are reported for a period of several years (1966 to 1985 in this report) and are based on information obtained from remeasurement plots (see Survey Procedures).

Average annual removals from sawtimber.—The average net board foot volume of live sawtimber trees removed annually for forest products (including roundwood products and other uses [see definition of other removals]). Average annual removals of sawtimber are reported for a period of several years (1966 to 1985 in this report) and are based on information obtained from remeasurement plots (see Survey Procedures).

Basal area.—The area in square feet of the cross section at breast height of a single tree. When the basal area of all trees in a stand are summed, the result is usually expressed as square feet of basal area per acre.

Biomass.—The above-ground volume of all live trees (including bark and foliage) reported in green tons. Biomass is made up of 5 components:

Growing-stock stumps.—Biomass of a growing-stock tree 1-foot stump.

Growing-stock bole.—Biomass of a growing-stock tree from a 1-foot stump to a variable 4-inch top.

Growing-stock tops and limbs.—Biomass of a growing-stock tree from a 1-foot stump minus the growing-stock bole.

Cull stumps.—Biomass of a cull tree 1-foot stump.

Cull bole.—Biomass of a cull tree from a 1-foot stump to a variable 4-inch top.

Cull tops and limbs.-Biomass of a cull tree from a 1-foot stump minus the cull bole.

1- to 5-inch trees.—Biomass of all live trees from 1 to 5 inches in diameter at breast height.

Commercial species.—Tree species presently or prospectively suitable for industrial wood products. (Note: Excludes species of typically small size, poor form, or inferior quality such as hophornbeam, osage-orange, and redbud.)

Commercial forest land.—(See definition of timberland).

County and municipal land.—Land owned by counties and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

Cropland.—Land under cultivation within the past 24 months. It includes cropland harvested, crop failures, cultivated summer fallow, idle cropland used only for pasture, orchards, and land in soil improvement crops, but excludes land cultivated in developing improved pasture.

Cull.—Portions of a tree that are unusable for industrial wood products because of rot, form, or other defect.

Diameter classes.—A classification of trees based on diameter outside bark, measured at breast height (4½ feet above the ground). (Note: D.b.h. is the common abbreviation for diameter at breast height. Two-inch diameter classes are commonly used in Forest Inventory and Analysis, with the even inch the approximate midpoint for a class. For example, the 6-inch class includes trees 5.0 through 6.9 inches d.b.h.)

Farm.—Any place from which $1,000 or more of agricultural products were produced and sold during the year.

Farmer-owned land.—Land owned by farm operators. (Note: Excludes land leased by farm operators from nonfarm owners, such as railroad companies and States.)

Forest land.—Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. (Note: Stocking is measured by comparing specified standards with basal area and/or number of trees, age or size, and spacing.) The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width of at least 120 feet to qualify as forest land. Unimproved roads and trails, streams, or other bodies of water or clearings in forest areas shall be classed as forest if less than 120 feet wide. Also see definitions for tree, land, timberland, reserved timberland, stocking, and water.

Forest industry land.—Land owned by companies or individuals operating primary wood-using plants.

Forest type.—A classification of forest land based on the species forming a plurality of live tree stocking. Major forest types in the State are:

White pine.—Forests in which eastern white pine comprises a plurality of the stocking. (Common associates include jack pine and red pine.)

Loblolly-shortleaf pine.—Forests in which loblolly and shortleaf pine, singly or in combination, comprise a plurality of the stocking. (Common associates include gum, hickory, sassafras, and yellow-poplar.)

Oak-pine.—Forests in which hardwoods (usually white, scarlet, chestnut, northern red, or black oaks), singly or in combination, comprise a plurality of the stocking but where pines comprise 25 to 50 percent of the stocking. (Common associates include gum, hickory, sassafras, and yellow-poplar.)

Oak-hickory.—Forests in which upland oaks or hickories, singly or in combination, comprise a plurality of the stocking. (Common associates include yellow-poplar, elm, maple, black walnut, black-locust, and sassafras.)

Oak-gum-cypress.—Bottomland forests in which tupelo, blackgum, sweetgum, oaks, or cypress, singly or in combination, comprise a plurality of the stocking. (Common associates include cottonwood, willow, ash, elm, hackberry, and maple.)

Elm-ash-soft maple.—Forests in which lowland elm, ash, red maple, and cottonwood, singly or in combination, comprise a plurality of the stocking. (Common associates include boxelder, willow, sycamore, and beech.)

Cottonwood.—Forests in which cottonwood comprises at least 50 percent of the stocking. (Associates include willow, elm, soft maple, and ash.)

Maple-beech.—Forests in which hard maple or beech, singly or in combination, comprise a plurality of the stocking. (Common associates include soft maple, elm, and basswood.)

Gross area.—The entire area of land and water as determined by the *1982 Soil Conservation Service National Resource Inventory.*

Growing-stock trees.—Live trees of commercial species meeting the size and quality standards that satisfy merchantability requirements. (Note: Excludes rough and rotten.)

Growing-stock volume.—Net volume in cubic feet of growing-stock trees 5 inches d.b.h. and over, from a 1-foot stump to a minimum 4 inch top diameter outside bark of the central stem or to the point where the central stem breaks into limbs. Cubic feet can be converted to standard cords by dividing by 79. One standard cord is 128 cubic feet of stacked wood, including bark and air.

Hard hardwoods.—Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, and hickories.

Hardwoods.—Dicotyledonous trees, usually broad-leaved and deciduous. See definitions of soft hardwoods and hard hardwoods.

Idle farmland.—Includes former cropland, orchards, improved pastures, and farm sites not tended within the past 2 years and presently less than 16.7 percent stocked with trees.

Improved pasture.—Land currently improved for grazing by cultivating, seeding, irrigating, or clearing of trees or brush and less than 16.7 percent stocked with live trees.

Industrial wood.—All roundwood products, except fuelwood.

Land.—A. *Bureau of the Census.* Dry land and land temporarily or partly covered by water such as marshes, swamps, and river flood plains (omitting tidal flats below mean high tide); streams, sloughs, estuaries, and canals less than one-eighth of a statute mile wide; and lakes, reservoirs, and ponds less than 40 acres in area. (This definition is also used by the Soil Conservation Service.)

B. *Forest Inventory and Analysis.* The same as the Bureau of the Census, except minimum width of streams, etc., is 120 feet and minimum size of lakes, etc., is 1 acre.

Live trees.—Growing-stock, rough, and rotten trees 1 inch d.b.h. and larger.

Log grades.—A classification of logs based on external characteristics as indicators of quality or value. (See Appendix for specific grading factors used.)

Logging residues.—The unused growing stock portions of trees cut or killed by logging.

Maintained road.—Any road, hard-topped or other surface, that is plowed or graded at least once a year. Includes rights-of-way that are cut or treated to limit herbaceous growth.

Marsh.—Nonforest land that characteristically supports low, generally herbaceous or shrubby vegetation and that is intermittently covered with water.

Merchantable.—Refers to a pulpwood or saw log section that meets pulpwood or saw log specifications, respectively.

Miscellaneous Federal land.—Federal land other than National Forest and land administered by the Bureau of Land Management.

Miscellaneous private land.—Privately owned land other than forest-industry and farmer-owned land.

Mortality.—The volume of sound wood in growing-stock and sawtimber trees that die annually.

National forest land.—Federal land that has been legally designated as national forest or purchase units, and other land administered by the USDA Forest Service.

Net annual growth of growing stock.—The annual change in volume of sound wood in live sawtimber and poletimber trees and the total volume of trees entering these classes through ingrowth, less volume losses resulting from natural causes.

Net annual growth of sawtimber.—The annual change in the volume of live sawtimber trees and the total volume of trees reaching sawtimber size, less volume losses resulting from natural causes.

Net volume.—Gross volume less deductions for rot, sweep, or other defect affecting use for timber products.

Noncommercial species.—Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial wood products.

Nonforest land.—Land that has never supported forests, and land formerly forested where use for timber management is precluded by development for other uses. (Note: Includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining clearings, powerline clearings of any width, and 1- to 40-acre areas of water classified by the Bureau of the Census as land. If intermingled in forest areas, unimproved roads and nonforest strips must be more than 120 feet wide and more than 1 acre in area to qualify as nonforest land.)

a. *Nonforest land without trees.*—Nonforest land with no live trees present.

b. *Nonforest land with trees.*—Nonforest land with one or more trees per acre at least 5 inches d.b.h.

Nonstocked land.—Timberland less than 16.7 percent stocked with growing-stock trees.

Other removals.—Growing-stock trees removed but not utilized for products, or trees left standing but "removed" from the timberland classification by land use change. Examples are removals from cultural operations such as timber stand improvement work, land clearing, and changes in land use.

Ownership.—Property owned by one owner, regardless of the number of parcels in a specified area.

Ownership size class.—The amount of timberland owned by one owner, regardless of the number of parcels.

Owner tenure.—The length of time a property has been held by the owner.

Pasture.—Land presently used for grazing or under cultivation to develop grazing.

Pastured timberland.—Timberland for which the primary use is wood production but is presently used for grazing.

Physiographic class.—A measure of soil and water conditions that affect tree growth on a site. The physiographic classes are:

Xeric sites.—Very dry soils where excessive drainage seriously limits both growth and species occurrence. Example: sandy jack pine plains.

Xeromesic sites.—Moderately dry soils where excessive drainage limits growth and species occurrence to some extent. Example: dry oak ridge.

Mesic sites.—Deep, well-drained soils. Growth and species occurrence are limited only by climate.

Hydromesic sites.—Moderately wet soils where insufficient drainage or infrequent flooding limits growth and species occurrence to some extent. Example: better drained bottomland hardwood sites.

Hydric sites.—Very wet sites where excess water seriously limits both growth and species occurrence. Example: frequently flooded river bottoms and cypress swamps.

Plant byproducts.—Plant residues used for products such as mulch, pulp chips, and fuelwood.

Plant residues.—Wood and bark materials generated at manufacturing plants during production of other products.

Poletimber stands.—(See definition of stand-size class.)

Poletimber trees.—Growing-stock trees of commercial species at least 5 inches d.b.h. but smaller than sawtimber size.

Reserved timberland.—Forest land sufficiently productive to qualify as timberland but withdrawn from timber utilization through statute, administrative regulation, designation, or exclusive use for Christmas tree production, as indicated by annual shearing. Formerly called productive-reserved forest land.

Rotten trees.—Live trees of commercial species that do not contain at least one 12-foot saw log or two saw logs 8 feet or longer, now or prospectively, and/or do not meet regional specifications for freedom from defect primarily because of rot; that is, when more than 50 percent of the cull volume in a tree is rotten.

Rough trees.—(a) Live trees of commercial species that do not contain at least one merchantable 12-foot saw log or two saw logs 8 feet or longer, now or prospectively, and/or do not meet regional specifications for freedom from defect primarily because of roughness or poor form, and (b) all live trees of noncommercial species.

Roundwood products.—Logs, bolts, or other round sections (including chips from roundwood) cut from trees for industrial or consumer uses. (Note: Includes saw logs, veneer logs, and bolts; cooperage logs and bolts; pulpwood; fuelwood; piling; poles; posts; hewn ties; mine timbers; and various other round, split, or hewn products.)

Salvable dead trees.—Standing or down dead trees considered merchantable by regional standards.

Saplings.—Live trees from 1 to 5 inches d.b.h.

Sapling-seedling stands.—(See definition of stand-size class.)

Saw log.—A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight and with a minimum top diameter outside bark (d.o.b.) for softwoods of 7 inches (9 inches for hardwoods) or other combinations of size and defect specified by regional standards.

Saw log portion.—That part of the bole of sawtimber trees between the stump and the saw log top.

Saw log top.—The point on the bole of sawtimber trees above which a saw log cannot be produced. The minimum saw log top is 7 inches d.o.b. for softwoods and 9 inches d.o.b. for hardwoods.

Sawtimber stands.—(See definition of stand-size class.)

Sawtimber trees.—Growing-stock trees of commercial species containing at least a 12-foot saw log or two noncontiguous saw logs 8 feet or longer, and meeting regional specifications for freedom from defect. Softwoods must be at least 9 inches d.b.h. Hardwoods must be at least 11 inches d.b.h.

Sawtimber volume.—Net volume of the saw log portion of live sawtimber in board feet, International ¼-inch rule, from stump to a minimum 7 inches top diameter outside bark (d.o.b.) for softwoods and a minimum 9 inches top d.o.b. for hardwoods.

Seedlings.—Live trees less than 1 inch d.b.h. that are expected to survive. Only softwood seedlings more than 6 inches tall and hardwood seedlings more than 1 foot tall are counted.

Short-log (rough tree).—Sawtimber-size trees of commercial species that contain at least one merchantable 8- to 11-foot saw log but not a 12-foot saw log.

Site class.—A classification of forest land in terms of inherent capacity to grow crops of industrial wood based on fully stocked natural stands.

Site index.—An expression of forest site quality based on the height of a free-growing dominant or codominant tree of a representative species in the forest type at age 50.

Soft hardwoods.—Hardwood species with an average specific gravity less than 0.50 such as gum, yellow-poplar, cottonwood, red maple, basswood, and willow.

Softwoods.—Coniferous trees, usually evergreen, having needles or scale-like leaves.

Stand.—A group of trees on a minimum of 1 acre of forest land that is stocked by forest trees of any size.

Stand-age class.—Age of the main stand. Main stand refers to trees of the dominant forest type and stand-size class.

Stand-area class.—The extent of a continuous forested area of the same forest type, stand-size class, and stand-density class.

Stand-size class.—A classification of stocked (see definition of stocking) forest land based on the size class of live trees on the area; that is, sawtimber, poletimber, or seedlings and saplings.

a. *Sawtimber stands.*—Stands with half or more of live stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

b. *Poletimber stands.*—Stands with half or more live stocking in poletimber and/or sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

c. *Sapling-seedling stands.*—Stands with more than half of the live stocking in saplings and/or seedlings.

State land.—Land owned either by States or leased to them for 50 years or more.

Stocking.—The degree of occupancy of land by trees, measured by basal area and/or the number of trees in a stand by size or age and spacing, compared to the basal area and/or number of trees required to fully utilize the growth potential of the land; that is, the stocking standard.

A stocking percent of 100 indicates full utilization of the site and is equivalent to 80 square feet of basal area per acre in trees 5 inches d.b.h. and larger. In a stand of trees less than 5 inches d.b.h., a stocking percent of 100 would indicate that the present number of trees is sufficient to produce 80 square feet of basal area per acre when the trees reach 5 inches d.b.h.

Stands are grouped into the following stocking classes:

Overstocked stands.—Stands in which stocking of trees is more than 130.0 percent.

Fully stocked stands.—Stands in which stocking of trees is from 100.0 to 129.9 percent.

Medium stocked stands.—Stands in which stocking of trees is from 60.0 to 99.9 percent.

Poorly stocked stands.—Stands in which stocking of trees is from 16.7 to 59.9 percent.

Nonstocked areas.—Timberland which stocking of trees is less than 16.7 percent.

Timberland.—Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization. (Note: Areas qualifying as timberland are capable of producing more than 20 cubic feet per acre per year of annual growth when managed. Currently inaccessible and inoperable areas are included except when the areas involved are small and unlikely to become suitable for producing industrial wood in the foreseeable future.) Formerly this was referred to as commercial forest land. Also see definition of pastured timberland.

Timber removals from growing stock.—The volume of sound wood in growing-stock trees removed for forest products (including roundwood products and logging residues) and for other uses (see definition of other removals). Timber removals from growing stock are reported for a single year (1985 in this report) and are based on information obtained from a survey of primary wood-using mills (see Survey Procedures).

Timber removals from sawtimber.—The net board-foot volume of live sawtimber trees removed for forest products (including roundwood products and logging residues) and for other uses (see definition of other removals). Timber removals from sawtimber are reported for a single year (1985 in this report) and are based on information obtained from a survey of primary wood-using mills (see Survey Procedures).

Timber products output.—All timber products cut from roundwood and byproducts of wood manufacturing plants. Roundwood products include logs, bolts, or other round sections cut from growing-stock trees, cull trees, salvable dead trees, trees on nonforest land, noncommercial species, sapling-size trees, and limbwood. Byproducts from primary manufacturing plants include slabs, edging, trimmings, miscuts, sawdust, shavings, veneer cores and clippings, and screenings of pulpmills that are used as pulpwood chips or other products.

Trees.—Woody plant having a well-developed stem and usually more than 12 feet tall at maturity.

Tree biomass.—The total aboveground weight (including the bark) of all live trees.

Tree grade.—The log grade of the butt log.

Tree size class.—A classification of trees based on diameter at breast height, including sawtimber trees, poletimber trees, saplings, and seedlings.

Upper stem portion.—That part of the bole of sawtimber trees above the saw log top to a minimum top diameter of 4 inches outside bark or to the point where the central stem breaks into limbs.

Urban and other areas.—Areas within the legal boundaries of cities and towns; suburban areas

developed for residential, industrial, or recreational purposes; schoolyards; cemeteries; roads; railroads; airports; beaches; powerlines and other rights-of-way; or other nonforest land not included in any other specified land use-class.

Urban forest land.—Land that meets the criteria for timberland but is in an urban-suburban area surrounded by commercial, industrial, or residential development.

Water.—(a) *Bureau of the Census.*—Permanent inland water surfaces, such as lakes, reservoirs, and ponds at least 40 acres in area; and streams, sloughs, estuaries, and canals at least one-eighth of a statute mile wide. (This definition is also used by the Soil Conservation Service.)

(b) *Noncensus.*—Permanent inland water surfaces, such as lakes, reservoirs, and ponds from 1 to 39.9 acres in area; and streams, sloughs, estuaries, and canals from 120 feet to one-eighth of a statute mile wide.

Windbreaks.—A group of trees whose primary use is to protect buildings currently in use.

Wooded pasture.—Improved pasture with more than 16.7 percent stocking in live trees but less than 25 percent stocking in growing-stock trees. Area is currently improved for grazing or there is other evidence of grazing.

Wooded strip.—An acre or more of natural continuous forest land that meets survey standards for timberland except that it is less than 120 feet wide.

Woodland.—Forest land incapable of producing 20 cubic feet per acre of annual growth or of yielding crops of industrial wood under natural conditions because of adverse site conditions. (Note: Adverse conditions include shallow soil, dry climate, poor drainage, high elevation, steepness, and rockiness.) Formerly this was called unproductive forest land.

TABLES

Text Tables

Table 1.— Area of timberland and change in area by Forest Survey Unit, 1962 and 1985

Table 2.— Area of timberland by forest type and physiographic class

Table 3.— Area of timberland by treatment or damage class and ownership class

Table 4.— Net volume of timber on timberland by class of timber and softwoods and hardwoods

Table 5.— Estimation of potential net annual growth on timberland

Table 6.— Projections of average annual change in removals, 1985-2014

Area

Table 7.— Area of land by land class and Forest Survey Unit, 1962 and 1985

Table 8.— Area of land by land use class and Forest Survey Unit

Table 9.— Area of land by county and major land use class

Table 10.— Area of timberland by ownership class and Forest Survey Unit

Table 11.— Area of timberland by county and ownership class

Table 12.— Area of timberland by county and forest type

Table 13.— Area of timberland by county and stand-size class

Table 14.— Area of timberland by county and site class

Table 15.— Area of timberland by county and stocking class of growing-stock trees

Table 16.— Area of timberland by forest type and ownership class

Table 17.— Area of timberland by ownership class and site class

Table 18.— Area of privately owned timberland by ownership class, owner tenure, and size of holding

Table 19.— Area of timberland by ownership class and stocking class of growing-stock trees

Table 20.— Area of timberland by forest type and stand-size class

Table 21.— Area of timberland by ownership class and stand volume class

Table 22.— Area of timberland by forest type, stand-size class, and ownership class

Table 23.— Area of timberland by forest type and Forest Survey Unit

Table 24.— Area of timberland by forest type, stand-size class, and site class

Table 25.— Area of timberland by stand-age class and forest type

Table 26.— Area of timberland by forest type, site-index class, and Forest Survey Unit

Table 27.— Area of timberland by forest type, stand-size class, and basal-area class

Table 28.— Area of timberland by stocking class based on selected stand components

Table 29.— Area of timberland in plantations by forest type and stand-age class

Table 30.— Area of timberland by class of water and distance to water

Table 31.— Area of timberland by distance to maintained road and type of road
Table 32.— Area of timberland by ownership class and posting
Table 33.— Area of nontimberland by ownership class
Table 34.— Area of nontimberland by forest type
Table 35.— Area of nonforest land with trees by forest type and land use

Volume

Table 36.— Number of all live trees on timberland by species group and diameter class
Table 37.— Number of growing-stock trees on timberland by species group and diameter class
Table 38.— Net volume of growing stock on timberland by species group
Table 39.— Net volume of all live trees on timberland by species group and diameter class
Table 40.— Net volume of timber on timberland by class of timber and species group
Table 41.— Net volume of growing stock in the saw log portion sawtimber trees on timberland by species group and diameter class
Table 42.— Net volume on timberland by major tree class and individual species
Table 43.— Net volume of noncommercial species on timberland by individual species
Table 44.— Net volume of growing stock on timberland by species group and Forest Survey Unit
Table 45.— Net volume of sawtimber on timberland by species group and Forest Survey Unit
Table 46.— Net volume of growing stock on timberland by species group and diameter class
Table 47.— Net volume of sawtimber on timberland by species group and diameter class
Table 48.— Volume of live trees and growing stock on timberland by ownership class and species group
Table 49.— Net volume of growing stock on timberland by species group and forest type
Table 50.— Net volume of sawtimber on timberland by species group and forest type
Table 51.— Net volume of growing stock on timberland by species group and ownership class
Table 52.— Net volume of sawtimber on timberland by species group and ownership class
Table 53.— Net volume of growing stock on timberland by forest type and stand-age class
Table 54.— Net volume of sawtimber on timberland by forest type and stand-age class
Table 55.— Net volume of growing stock on timberland by forest type, stand-size class, and basal-area class
Table 56.— Net volume of sawtimber on timberland by forest type, stand-size class, and basal-area class
Table 57.— Growing-stock and sawtimber volume on timberland by species group, county, and Forest Survey Unit
Table 58.— Net volume of sawtimber on timberland by species group and tree grade
Table 59.— Net volume of sawtimber on timberland by species group, log grade, and diameter class
Table 60.— Net volume of short-log trees on timberland by species group and diameter class (In thousand cubic feet)
Table 61.— Net volume of short-log trees on timberland by species group and diameter class (In thousand board feet)

Growth

Table 62.— Net annual growth of growing stock on timberland by species group, 1961 and 1984
Table 63.— Net annual growth of growing stock on timberland by species group and Forest Survey Unit
Table 64.— Net annual growth of sawtimber on timberland by species group and Forest Survey Unit
Table 65.— Net annual growth of growing stock on timberland by species group and ownership class
Table 66.— Net annual growth of sawtimber on timberland by species group and ownership class
Table 67.— Net annual growth of growing stock on timberland by species group and forest type
Table 68.— Net annual growth of sawtimber on timberland by species group and forest type
Table 69.— Net annual growth of growing stock on timberland by forest type and stand-age class

Table 70.— Net annual growth of sawtimber on timberland by forest type and stand-age class
Table 71.— Net annual growth of growing stock on timberland by forest type, stand-size class, and basal-area class
Table 72.— Net annual growth of sawtimber on timberland by forest type, stand-size class, and basal-area class
Table 73.— Net annual growth of growing stock and sawtimber on timberland by county and major species group

Removals

Table 74.— Timber removals from growing stock on timberland by species group and Forest Survey Unit
Table 75.— Timber removals from sawtimber on timberland by species group and Forest Survey Unit
Table 76.— Timber removals from growing stock and sawtimber on timberland by Forest Survey Unit and major species group
Table 77.— Timber removals from growing stock and sawtimber on timberland by species group
Table 78.— Timber removals from growing stock and sawtimber on timberland by item and species category
Table 79.— Net annual growth and removals of growing stock and sawtimber on timberland by species group
Table 80.— Net annual growth and removals of growing stock on timberland by ownership class and major species group
Table 81.— Net annual growth and removals of sawtimber on timberland by ownership class and major species group

Mortality

Table 82.— Annual mortality of growing stock on timberland by species group, 1961 and 1984
Table 83.— Annual mortality of growing stock and sawtimber on timberland by species group
Table 84.— Annual mortality of growing stock on timberland by species group and cause of death
Table 85.— Annual mortality of sawtimber on timberland by species group and cause of death
Table 86.— Annual mortality of growing stock and sawtimber on timberland by ownership class and softwoods and hardwoods

Utilization

Table 87.— Output of timber products by product, softwoods and hardwoods, and source of material
Table 88.— Output of roundwood products by product, softwoods and hardwoods, and source of material
Table 89.— Timber products from roundwood by species group and product
Table 90.— Volume of primary plant residue by use and type of residue

Biomass

Table 91.— All live shrub biomass yields on timberland by shrub species group and forest type
Table 92.— All live tree biomass yields on timberland by species group and forest type
Table 93.— All live tree biomass on timberland by species group and forest type
Table 94.— All live tree biomass on timberland by species group and tree biomass component
Table 95.— All live tree biomass on timberland by species group and tree biomass component

Projections

Table 96.— Removals, net annual growth, and inventory of growing stock on timberland, 1985, and low removals option projections to 2015
Table 97.— Removals, net annual growth, and inventory of growing stock on timberland, 1985, and high removals option projections to 2015

Sampling Errors

Table 98.— Sampling error for estimates smaller than the Unit totals of volume, net growth, removals, and area of timberland

Table 7.--Area of land by land class and Forest Survey Unit, Illinois, 1962 and 1985[1/]

(In thousand acres)

Land class	All Units		Southern Unit		Claypan Unit		Prairie Unit	
	1962	1985	1962	1985	1962	1985	1962	1985
Forest land								
Timberland								
White pine	0.4	20.2	--	3.1	--	2.0	0.4	15.1
Loblolly-shortleaf pine	31.9	45.5	31.2	45.5	0.7	--	--	--
Oak-pine	11.4	13.3	9.0	11.7	2.4	--	--	1.6
Oak-hickory	2,300.5	2,025.0	674.4	483.9	811.5	700.5	814.6	840.6
Oak-gum-cypress	16.7	137.8	6.3	82.3	10.4	55.5	--	--
Elm-ash-soft maple	1,482.3	685.8	361.3	182.1	575.3	258.4	545.7	245.3
Cottonwood	--	34.8	--	11.0	--	7.1	--	16.7
Maple-beech	85.0	1,046.4	2.2	225.6	8.0	252.4	74.8	568.4
Aspen-birch	9.1	--	--	--	--	--	9.1	--
Nonstocked	43.2	21.1	24.6	6.5	8.8	1.7	9.8	12.9
Subtotal	3,980.5	4,029.9	1,109.0	1,051.7	1,417.1	1,277.6	1,454.4	1,700.6
Reserved timberland	44.9	235.6	10.6	59.3	4.7	20.8	29.6	155.5
Unproductive	9.0	--	9.0	--	--	--	--	--
Subtotal	53.9	235.6	19.6	59.3	4.7	20.8	29.6	155.5
Total	4,034.4	4,265.5	1,128.6	1,111.0	1,421.8	1,298.4	1,484.0	1,856.1
Nonforest land[2/]								
Cropland	--	24,755.0	--	2,025.6	--	5,519.0	--	17,210.4
Pasture and range	--	2,666.8	--	362.4	--	853.1	--	1,451.3
Other	--	3,942.7	--	401.5	--	769.8	--	2,771.4
Total	31,725.4	31,364.5	2,807.3	2,789.5	7,060.2	7,141.9	21,857.9	21,433.1
Total land[3/]	35,759.8	35,630.0	3,935.9	3,900.5	8,482.0	8,440.3	23,341.9	23,289.2
Water [3/]	336.2	430.8	47.5	67.3	54.3	102.1	234.4	261.4
Total land and water[3/]	36,096.0	36,060.8	3,983.4	3,967.8	8,536.3	8,542.4	23,576.3	23,550.6

[1/] Figures have been adjusted from those published after the 1962 survey to conform to 1985 areas because of changes in survey procedures and definitions.

[2/] Figures for 1962 nonforest land were unavailable by category.

[3/] Land and water figures for 1962 came from the U.S. Department of Commerce, Bureau of Census, 1960. Figures for 1985 came from the 1982 National Resource Inventory, Soil Conservation Service, USDA.

Table 8.--Area of land by land use class and Forest Survey Unit, Illinois, 1985

(In thousand acres)

Land use class	All Units	Forest Survey Unit		
		Southern Unit	Claypan Unit	Prairie Unit
Forest land				
Timberland	4,029.9	1,051.7	1,277.6	1,700.6
Reserved timberland	235.6	59.3	20.8	155.5
Total	4,265.5	1,111.0	1,298.4	1,856.1
Nonforest land				
Nonforest with trees				
Cropland with trees	53.5	7.4	16.6	29.5
Improved pasture with trees	103.6	33.4	44.3	25.9
Wooded strips	178.5	35.8	74.1	68.6
Idle farmland with trees	8.1	2.4	1.7	4.0
Marsh with trees	19.3	4.4	5.9	9.0
Urban forest	102.8	--	17.0	85.8
Urban and other with trees	139.5	11.3	38.4	89.8
Windbreaks	133.1	22.0	43.1	68.0
Wooded pasture	162.4	20.0	46.5	95.9
Subtotal	900.8	136.7	287.6	476.5
Nonforest without trees				
Cropland without trees	24,701.5	2,018.2	5,502.4	17,180.9
Improved pasture without trees	2,400.8	309.0	762.3	1,329.5
Idle farm without trees	22.4	--	3.2	19.2
Other farm-farmstead	634.8	72.8	183.4	378.6
Urban and other	2,621.6	229.2	384.7	2,007.7
Noncensus water	82.6	23.6	18.3	40.7
Subtotal	30,463.7	2,652.8	6,854.3	20,956.6
Total	31,364.5	2,789.5	7,141.9	21,433.1
Total land	35,630.0	3,900.5	8,440.3	23,289.2
Water[1/]	430.8	67.3	102.1	261.4
Total land and water[1/]	36,060.8	3,967.8	8,542.4	23,550.6

[1/] 1982 National Resource Inventory, Soil Conservation Service, USDA.

Table 9.--Area of land by county and major land use class, Illinois, 1985

County	Land area	Forest land			Timberland as a percent of land area	Nonforest land with trees	Nonforest land as a percent of land area
		All forest land	Reserved timberland	Timberland			
	Thousand acres				Percent	Thousand acres	Percent
SOUTHERN UNIT							
Alexander	151.0	58.3	3.8	54.5	36.1	3.0	2.0
Franklin	265.2	47.4	1.6	45.8	17.3	9.8	3.7
Gallatin	207.8	44.0	--	44.0	21.2	6.5	3.1
Hamilton	278.9	40.4	0.8	39.6	14.2	7.1	2.5
Hardin	115.8	64.6	1.1	63.5	54.8	7.6	6.6
Jackson	377.3	134.6	3.8	130.8	34.7	11.7	3.1
Johnson	221.7	89.9	5.5	84.4	38.1	9.9	4.5
Massac	153.9	34.5	2.8	31.7	20.6	6.5	4.2
Perry	283.0	52.8	2.7	50.1	17.7	9.4	3.3
Pope	239.6	149.3	6.4	142.9	59.6	7.9	3.3
Pulaski	130.1	29.7	0.2	29.5	22.7	4.2	3.2
Randolph	372.9	80.7	2.1	78.6	21.1	10.2	2.7
Saline	246.3	54.4	4.1	50.3	20.4	10.3	4.2
Union	265.1	104.7	19.6	85.1	32.1	12.4	4.7
White	318.2	40.3	--	40.3	12.7	9.5	3.0
Williamson	273.7	85.4	4.8	80.6	29.4	10.7	3.9
Total	3,900.5	1,111.0	59.3	1,051.7	27.0	136.7	3.5
CLAYPAN UNIT							
Bond	241.0	29.6	--	29.6	12.3	8.1	3.4
Calhoun	159.8	66.6	1.4	65.2	40.8	9.4	5.9
Clark	322.7	62.5	1.0	61.5	19.1	9.3	2.9
Clay	300.2	48.4	--	48.4	16.1	11.4	3.8
Clinton	302.1	43.2	--	43.2	14.3	7.7	2.5
Crawford	285.2	49.9	0.6	49.3	17.3	8.7	3.1
Cumberland	221.2	33.7	--	33.7	15.2	7.5	3.4
Edwards	142.5	16.6	--	16.6	11.6	4.6	3.2
Effingham	306.0	51.2	0.4	50.8	16.6	11.0	3.6
Fayette	460.1	86.8	4.1	82.7	18.0	16.9	3.7
Greene	347.6	50.7	--	50.7	14.6	14.9	4.3
Jasper	317.2	33.8	0.4	33.4	10.5	9.8	3.1
Jefferson	364.6	69.3	0.2	69.1	19.0	16.8	4.6
Jersey	238.5	63.3	5.7	57.6	24.2	7.6	3.2
Lawrence	239.4	32.5	0.8	31.7	13.2	8.1	3.4
Macoupin	553.5	84.8	0.4	84.4	15.2	21.1	3.8
Madison	466.0	54.2	0.6	53.6	11.5	20.5	4.4
Marion	366.6	67.5	1.9	65.6	17.9	12.8	3.5
Monroe	248.5	51.5	1.3	50.2	20.2	8.7	3.5
Montgomery	450.5	39.4	--	39.4	8.7	12.0	2.7
Richland	230.5	30.5	--	30.5	13.2	9.0	3.9
St. Clair	430.1	51.4	0.4	51.0	11.9	14.7	3.4
Shelby	485.1	55.0	--	55.0	11.3	8.4	1.7
Wabash	143.1	12.6	0.4	12.2	8.5	3.6	2.5
Washington	360.7	51.4	0.8	50.6	14.0	7.6	2.1
Wayne	457.6	62.0	0.4	61.6	13.5	17.4	3.8
Total	8,440.3	1,298.4	20.8	1,277.6	15.1	287.6	3.4

(Table 9 continued on next page)

(Table 9 continued)

PRAIRIE UNIT

County	Land area	Forest land			Timberland as a percent of land area	Nonforest land with trees	Nonforest land as a percent of land area
		All forest land	Reserved timberland	Timberland			
	Thousand acres				Percent	Thousand acres	Percent
Adams	545.3	88.6	3.7	84.9	15.6	14.9	2.7
Boone	180.3	8.8	0.3	8.5	4.7	1.2	0.7
Brown	195.9	54.6	3.1	51.5	26.3	10.5	5.4
Bureau	556.2	38.7	3.1	35.6	6.4	9.5	1.7
Carroll	284.5	32.1	2.2	29.9	10.5	6.5	2.3
Cass	239.2	43.3	6.1	37.2	15.6	6.4	2.7
Champaign	638.8	9.0	1.1	7.9	1.2	3.4	0.5
Christian	454.1	21.3	1.6	19.7	4.3	6.2	1.4
Coles	325.5	27.8	2.1	25.7	7.9	6.5	2.0
Cook	613.0	47.9	43.6	4.3	0.7	24.6	4.0
De Kalb	405.6	5.3	0.6	4.7	1.2	1.7	0.4
De Witt	253.7	14.1	0.7	13.4	5.3	4.5	1.8
Douglas	266.9	7.7	0.9	6.8	2.5	1.5	0.6
Du Page	215.5	6.7	0.1	6.6	3.1	6.4	3.0
Edgar	398.7	23.9	0.8	23.1	5.8	5.9	1.5
Ford	310.8	2.9	--	2.9	0.9	2.1	0.7
Fulton	557.0	108.8	4.1	104.7	18.8	21.3	3.8
Grundy	270.3	17.7	1.1	16.6	6.1	3.1	1.1
Hancock	509.1	66.3	2.0	64.3	12.6	15.8	3.1
Henderson	238.7	36.7	3.1	33.6	14.1	4.4	1.8
Henry	527.3	23.1	1.2	21.9	4.2	9.1	1.7
Iroquois	715.7	21.3	1.2	20.1	2.8	6.7	0.9
Jo Daviess	385.8	72.9	2.9	70.0	18.1	15.8	4.1
Kane	335.5	17.1	0.6	16.5	4.9	8.2	2.4
Kankakee	434.3	17.8	2.5	15.3	3.5	5.2	1.2
Kendall	206.2	7.1	0.7	6.4	3.1	2.0	1.0
Knox	460.8	50.5	1.0	49.5	10.7	12.2	2.6
Lake	290.9	4.5	3.6	0.9	0.3	22.5	7.7
La Salle	728.8	39.0	6.2	32.8	4.5	8.7	1.2
Lee	463.9	15.2	2.0	13.2	2.8	4.1	0.9
Livingston	669.1	10.8	0.3	10.5	1.6	3.8	0.6
Logan	396.1	9.9	0.9	9.0	2.3	3.0	0.8
Macon	372.1	8.5	0.6	7.9	2.1	5.5	1.5
Marshall	248.4	25.8	1.6	24.2	9.7	4.4	1.8
Mason	343.1	43.0	3.5	39.5	11.5	4.6	1.3
McDonough	377.3	36.6	2.3	34.3	9.1	9.1	2.4
McHenry	388.2	21.9	1.9	20.0	5.2	7.6	2.0
McLean	758.3	17.5	1.8	15.7	2.1	7.4	1.0
Menard	201.8	21.9	0.8	21.1	10.5	4.6	2.3
Mercer	357.7	34.3	0.7	33.6	9.4	8.1	2.3
Morgan	363.3	41.3	0.7	40.6	11.2	14.4	4.0
Moultrie	214.8	12.7	0.2	12.5	5.8	4.5	2.1
Ogle	486.0	32.3	2.5	29.8	6.1	7.2	1.5
Peoria	397.1	63.2	4.9	58.3	14.7	16.3	4.1
Piatt	281.0	6.7	2.9	3.8	1.4	1.1	0.4
Pike	531.1	122.5	2.7	119.8	22.6	24.4	4.6
Putnam	102.2	16.8	0.6	16.2	15.9	3.1	3.0
Rock Island	270.5	44.9	2.9	42.0	15.5	11.9	4.4
Sangamon	554.0	29.1	0.9	28.2	5.1	9.7	1.8
Schuyler	279.1	84.4	1.8	82.6	29.6	11.2	4.0
Scott	160.4	24.0	0.7	23.3	14.5	5.2	3.2
Stark	184.1	5.2	0.1	5.1	2.8	1.9	1.0
Stephenson	361.3	17.9	0.8	17.1	4.7	6.1	1.7
Tazewell	415.8	28.4	2.1	26.3	6.3	11.1	2.7
Vermilion	575.9	36.4	4.0	32.4	5.6	7.0	1.2
Warren	347.8	22.6	0.5	22.1	6.4	5.3	1.5
Whiteside	437.0	19.9	2.2	17.7	4.1	4.8	1.1
Will	540.0	34.2	4.9	29.3	5.4	8.4	1.6
Winnebago	329.9	22.6	2.2	20.4	6.2	8.7	2.6
Woodford	337.5	30.1	1.3	28.8	8.5	5.2	1.5
Total	23,289.2	1,856.1	155.5	1,700.6	7.3	476.5	2.0
All counties	35,630.0	4,265.5	235.6	4,029.9	11.3	900.8	2.5

Table 10.--Area of timberland by ownership class and Forest Survey Unit, Illinois, 1985

(In thousand acres)

Ownership class	All Units	Forest Survey Unit		
		Southern Unit	Claypan Unit	Prairie Unit
National Forest	225.8	225.8	--	--
Miscellaneous federal	66.3	31.3	14.6	20.4
State	54.7	27.9	10.8	16.0
County and municipal	41.8	2.9	11.2	27.7
Forest industry	13.0	5.1	4.0	3.9
Farmer	1,828.0	289.2	557.2	981.6
Misc. private-corp.	263.1	97.2	46.7	119.2
Misc. private-indiv.	1,537.2	372.3	633.1	531.8
All owners	4,029.9	1,051.7	1,277.6	1,700.6

Table 11.--Area of timberland by county and ownership class, Illinois, 1985

(In thousand acres)

County	All owners	Ownership class							
		National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. private-corp.	Misc. private-indiv.
SOUTHERN UNIT									
Alexander	54.5	24.2	1.1	1.2	0.1	0.2	10.3	3.7	13.7
Franklin	45.8	--	1.8	1.5	0.1	0.1	17.2	4.9	20.2
Gallatin	44.0	10.3	1.3	1.0	0.1	0.1	12.6	3.6	15.0
Hamilton	39.6	--	1.5	1.4	0.1	0.1	14.7	4.4	17.4
Hardin	63.5	23.1	1.5	1.2	0.1	0.2	14.9	5.0	17.5
Jackson	130.8	39.6	3.5	2.7	0.3	0.3	33.2	10.4	40.8
Johnson	84.4	17.1	2.8	2.4	0.1	0.3	22.8	7.1	31.8
Massac	31.7	2.6	1.0	0.8	0.1	0.1	10.9	3.3	12.9
Perry	50.1	--	1.8	1.8	0.2	0.5	16.7	6.4	22.7
Pope	142.9	76.1	2.5	2.2	0.3	0.4	23.3	8.1	30.0
Pulaski	29.5	--	1.1	1.2	0.1	0.3	9.8	3.8	13.2
Randolph	78.6	--	3.0	2.9	0.4	0.9	26.4	10.3	34.7
Saline	50.3	10.4	1.4	1.2	0.2	0.2	14.6	4.7	17.6
Union	85.1	22.4	2.1	2.3	0.3	0.4	21.8	7.8	28.0
White	40.3	--	1.8	1.6	0.1	0.3	14.2	3.7	18.6
Williamson	80.6	--	3.1	2.5	0.3	0.7	25.8	10.0	38.2
Total	1,051.7	225.8	31.3	27.9	2.9	5.1	289.2	97.2	372.3
CLAYPAN UNIT									
Bond	29.6	--	0.3	0.1	0.2	0.2	12.7	0.8	15.3
Calhoun	65.2	--	0.8	0.6	0.6	0.2	28.2	2.6	32.2
Clark	61.5	--	0.6	0.8	0.7	0.1	26.9	2.5	29.9
Clay	48.4	--	0.6	0.4	0.4	0.1	20.6	1.9	24.4
Clinton	43.2	--	0.5	0.5	0.4	--	18.9	1.8	21.1
Crawford	49.3	--	0.5	0.5	0.5	0.1	21.3	2.0	24.4
Cumberland	33.7	--	0.4	0.1	0.3	0.2	14.3	0.8	17.6
Edwards	16.6	--	0.2	0.1	0.1	0.1	7.2	0.4	8.5
Effingham	50.8	--	0.5	0.3	0.3	0.2	22.0	1.7	25.8
Fayette	82.7	--	1.1	0.1	0.7	0.6	36.7	2.2	41.3
Greene	50.7	--	0.5	0.5	0.4	0.1	22.8	1.8	24.6
Jasper	33.4	--	0.5	0.1	0.3	0.2	14.1	1.0	17.2
Jefferson	69.1	--	0.7	0.7	0.6	0.2	30.7	2.7	33.5
Jersey	57.6	--	0.7	0.6	0.5	0.1	25.1	2.3	28.3
Lawrence	31.7	--	0.4	0.2	0.2	0.1	13.8	1.1	15.9
Macoupin	84.4	--	1.1	0.7	0.7	0.2	37.0	3.5	41.2
Madison	53.6	--	0.6	0.6	0.5	0.1	23.6	2.0	26.2
Marion	65.6	--	0.7	0.7	0.6	0.2	28.7	2.6	32.1
Monroe	50.2	--	0.6	0.5	0.6	0.1	21.9	2.1	24.4
Montgomery	39.4	--	0.4	0.4	0.4	0.1	17.3	1.3	19.5
Richland	30.5	--	0.3	0.2	0.3	0.1	13.2	1.0	15.4
St. Clair	51.0	--	0.6	0.4	0.4	0.2	22.2	1.9	25.3
Shelby	55.0	--	0.6	0.6	0.5	0.1	23.9	2.3	27.0
Wabash	12.2	--	0.2	0.1	0.1	0.1	5.2	0.4	6.1
Washington	50.6	--	0.5	0.5	0.5	0.2	22.3	1.8	24.8
Wayne	61.6	--	0.7	0.5	0.4	0.1	26.6	2.2	31.1
Total	1,277.6	--	14.6	10.8	11.2	4.0	557.2	46.7	633.1

(Table 11 continued on next page)

(Table 11 continued)

PRAIRIE UNIT

County	All owners	Ownership class: National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. private-corp.	Misc. private-indiv.
Adams	84.9	--	1.0	0.6	1.9	0.1	46.7	5.5	29.1
Boone	8.5	--	0.1	0.1	0.1	--	5.0	0.5	2.7
Brown	51.5	--	0.7	0.3	0.8	0.3	29.5	4.7	15.2
Bureau	35.6	--	0.4	0.2	0.4	0.2	21.5	3.5	9.4
Carroll	29.9	--	0.4	0.2	0.6	--	16.7	1.7	10.3
Cass	37.2	--	0.4	0.7	0.8	--	20.2	2.5	12.6
Champaign	7.9	--	0.1	--	0.1	--	5.1	0.5	2.1
Christian	19.7	--	0.2	0.1	0.2	0.1	11.9	1.6	5.6
Coles	25.7	--	0.3	0.2	0.4	0.1	14.8	2.3	7.6
Cook	4.3	--	--	--	--	--	1.5	0.3	2.5
De Kalb	4.7	--	0.1	--	0.1	--	2.7	0.2	1.6
De Witt	13.4	--	0.1	0.1	0.1	--	8.5	1.2	3.4
Douglas	6.8	--	0.1	--	0.1	--	4.1	0.6	1.9
Du Page	6.6	--	0.1	0.5	0.1	--	3.4	0.3	2.2
Edgar	23.1	--	0.3	0.2	0.3	0.1	13.4	2.0	6.8
Ford	2.9	--	--	--	--	--	1.9	0.1	0.9
Fulton	104.7	--	1.3	0.8	2.1	0.1	59.3	6.4	34.7
Grundy	16.6	--	0.2	0.2	0.3	--	9.4	1.1	5.4
Hancock	64.3	--	0.8	0.4	0.9	0.4	37.0	5.8	19.0
Henderson	33.6	--	0.4	0.9	0.7	0.1	18.1	2.2	11.2
Henry	21.9	--	0.3	0.1	0.3	0.1	12.6	1.8	6.7
Iroquois	20.1	--	0.3	0.3	0.1	--	12.6	1.2	5.6
Jo Daviess	70.0	--	0.8	0.5	1.4	0.1	39.3	4.1	23.8
Kane	16.5	--	0.1	0.1	0.2	0.1	9.9	1.6	4.5
Kankakee	15.3	--	0.1	0.2	0.1	0.1	9.3	1.5	4.0
Kendall	6.4	--	0.1	0.1	0.1	--	3.8	0.4	1.9
Knox	49.5	--	0.6	0.4	0.9	0.1	28.3	3.1	16.1
Lake	0.9	--	--	--	--	--	0.4	--	0.5
La Salle	32.8	--	0.4	0.3	0.6	0.1	18.4	2.1	10.9
Lee	13.2	--	0.1	0.2	0.3	--	7.3	0.7	4.6
Livingston	10.5	--	0.1	--	0.1	0.1	6.5	0.9	2.8
Logan	9.0	--	0.1	0.1	0.1	--	5.7	0.6	2.4
Macon	7.9	--	0.1	0.1	0.1	--	4.5	0.8	2.3
Marshall	24.2	--	0.3	0.2	0.6	--	13.3	1.4	8.4
Mason	39.5	--	0.5	1.0	0.8	0.1	20.7	3.2	13.2
McDonough	34.3	--	0.5	0.3	0.5	0.2	19.8	3.0	10.0
McHenry	20.0	--	0.2	0.2	0.3	--	11.8	1.0	6.5
McLean	15.7	--	0.1	--	0.1	--	10.1	1.3	4.1
Menard	21.1	--	0.3	0.2	0.2	--	12.9	1.4	6.1
Mercer	33.6	--	0.4	0.4	0.6	--	19.1	2.0	11.1
Morgan	40.6	--	0.4	0.3	0.3	0.2	25.3	3.0	11.1
Moultrie	12.5	--	0.1	--	0.1	--	8.0	1.0	3.3
Ogle	29.8	--	0.4	0.2	0.6	--	16.6	1.6	10.4
Peoria	58.3	--	0.7	0.4	1.2	0.1	32.7	3.7	19.5
Piatt	3.8	--	--	--	0.1	--	2.2	0.3	1.2
Pike	119.8	--	1.5	1.2	1.4	0.3	73.3	8.2	33.9
Putnam	16.2	--	0.2	0.1	0.4	--	9.0	1.0	5.5
Rock Island	42.0	--	0.5	0.5	0.9	--	23.3	2.6	14.2
Sangamon	28.2	--	0.4	0.2	0.5	0.1	15.7	1.8	9.5
Schuyler	82.6	--	1.2	1.0	1.0	0.2	50.6	4.8	23.8
Scott	23.3	--	0.3	0.2	0.3	0.1	13.4	2.1	6.9
Stark	5.1	--	0.1	--	0.1	--	2.9	0.3	1.7
Stephenson	17.1	--	0.2	0.1	0.3	0.1	9.5	1.0	5.9
Tazewell	26.3	--	0.3	0.3	0.6	--	14.5	1.6	9.0
Vermilion	32.4	--	0.4	0.2	0.5	0.1	19.4	2.6	9.2
Warren	22.1	--	0.3	0.2	0.4	0.1	12.6	1.4	7.1
Whiteside	17.7	--	0.2	0.3	0.3	--	10.0	1.0	5.9
Will	29.3	--	0.2	0.2	0.2	0.1	18.0	3.2	7.4
Winnebago	20.4	--	0.3	0.2	0.4	--	11.6	1.2	6.7
Woodford	28.8	--	0.3	0.2	0.7	--	16.0	1.7	9.9
Total	1,700.6	--	20.4	16.0	27.7	3.9	981.6	119.2	531.8
All counties	4,029.9	225.8	66.3	54.7	41.8	13.0	1,828.0	263.1	1,537.2

Table 12.--Area of timberland by county and forest type, Illinois, 1985

(In thousand acres)

County	All types	White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
					Forest type					
SOUTHERN UNIT										
Alexander	54.5	--	0.8	0.5	35.1	2.7	7.0	0.6	7.7	0.1
Franklin	45.8	--	0.5	0.2	18.6	4.1	9.6	0.3	12.3	0.2
Gallatin	44.0	0.2	2.4	0.3	20.7	3.1	7.6	0.1	9.5	0.1
Hamilton	39.6	--	0.4	0.2	16.0	3.4	8.2	0.2	10.8	0.4
Hardin	63.5	1.0	5.8	0.7	30.9	3.6	8.7	0.3	12.2	0.3
Jackson	130.8	0.6	2.3	0.8	61.6	15.4	23.8	0.4	25.4	0.5
Johnson	84.4	0.5	3.7	1.3	37.5	6.5	14.5	0.8	19.1	0.5
Massac	31.7	--	1.2	0.2	13.3	2.8	6.1	0.2	7.8	0.1
Perry	50.1	--	0.4	0.8	19.2	4.6	10.2	1.2	13.1	0.6
Pope	142.9	0.6	22.0	2.2	72.9	6.3	15.6	0.8	22.1	0.4
Pulaski	29.5	--	0.3	0.5	11.4	2.4	6.4	0.8	7.4	0.3
Randolph	78.6	--	0.6	1.2	30.7	6.7	16.9	2.0	19.6	0.9
Saline	50.3	0.1	2.4	0.3	23.5	3.4	8.6	0.4	11.1	0.5
Union	85.1	0.1	1.7	1.3	44.4	5.6	14.9	1.2	15.6	0.3
White	40.3	--	0.4	0.1	16.2	3.6	8.5	0.5	10.7	0.3
Williamson	80.6	--	0.6	1.1	31.9	8.1	15.5	1.2	21.2	1.0
Total	1,051.7	3.1	45.5	11.7	483.9	82.3	182.1	11.0	225.6	6.5
CLAYPAN UNIT										
Bond	29.6	--	--	--	16.6	1.3	6.4	0.1	5.1	0.1
Calhoun	65.2	--	--	--	35.6	2.9	12.6	0.4	13.5	0.2
Clark	61.5	--	--	--	34.2	2.6	12.6	0.5	11.6	--
Clay	48.4	0.6	--	--	25.6	2.0	9.1	0.3	10.5	0.3
Clinton	43.2	0.2	--	--	23.6	1.9	9.0	0.3	8.2	--
Crawford	49.3	--	--	--	27.4	2.2	10.1	0.4	9.2	--
Cumberland	33.7	0.2	--	--	18.7	1.4	6.3	--	7.0	0.1
Edwards	16.6	--	--	--	9.3	0.7	3.7	0.1	2.8	--
Effingham	50.8	0.2	--	--	27.7	2.3	10.6	0.2	9.8	--
Fayette	82.7	0.2	--	--	44.1	3.4	14.2	0.1	20.4	0.3
Greene	50.7	--	--	--	27.5	2.2	10.2	0.3	10.5	--
Jasper	33.4	--	--	--	18.9	1.5	7.2	0.1	5.6	0.1
Jefferson	69.1	--	--	--	37.8	3.0	13.7	0.4	14.2	--
Jersey	57.6	--	--	--	32.0	2.6	11.8	0.4	10.8	--
Lawrence	31.7	0.2	--	--	17.3	1.4	7.0	0.1	5.6	0.1
Macoupin	84.4	--	--	--	45.1	3.7	16.7	0.5	18.1	0.3
Madison	53.6	--	--	--	29.6	2.3	10.8	0.4	10.5	--
Marion	65.6	--	--	--	36.4	2.9	13.5	0.5	12.3	--
Monroe	50.2	--	--	--	27.8	2.2	10.9	0.3	9.0	--
Montgomery	39.4	--	--	--	21.5	1.7	8.1	0.3	7.8	--
Richland	30.5	0.2	--	--	16.5	1.2	5.8	0.1	6.6	0.1
St. Clair	51.0	--	--	--	28.1	2.2	11.0	0.3	9.3	0.1
Shelby	55.0	--	--	--	30.6	2.4	11.5	0.4	10.1	--
Wabash	12.2	--	--	--	6.8	0.6	2.7	--	2.1	--
Washington	50.6	--	--	--	27.9	2.2	10.1	0.3	10.1	--
Wayne	61.6	0.2	--	--	33.9	2.7	12.8	0.3	11.7	--
Total	1,277.6	2.0	--	--	700.5	55.5	258.4	7.1	252.4	1.7

(Table 12 continued on next page)

(Table 12 continued)

PRAIRIE UNIT

County	All types	Forest type								
		White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
Adams	84.9	0.6	--	--	44.8	--	11.8	0.9	26.1	0.7
Boone	8.5	--	--	--	4.2	--	1.2	0.1	2.9	0.1
Brown	51.5	0.6	--	--	26.0	--	7.6	0.6	16.4	0.3
Bureau	35.6	0.4	--	--	16.5	--	5.8	0.3	12.5	0.1
Carroll	29.9	0.2	--	--	15.5	--	4.1	0.3	9.5	0.3
Cass	37.2	0.6	--	0.3	18.7	--	5.5	0.4	11.4	0.3
Champaign	7.9	--	--	--	3.6	--	1.3	0.1	2.8	0.1
Christian	19.7	0.2	--	--	9.5	--	2.9	0.3	6.6	0.2
Coles	25.7	0.3	--	--	12.9	--	3.8	0.3	8.3	0.1
Cook	4.3	--	--	0.1	2.7	--	0.5	--	1.0	--
De Kalb	4.7	--	--	--	2.4	--	0.7	--	1.6	--
De Witt	13.4	0.1	--	--	5.8	--	2.2	0.1	5.1	0.1
Douglas	6.8	0.1	--	--	3.4	--	1.0	0.1	2.2	--
Du Page	6.6	0.3	--	--	2.9	--	1.2	0.1	2.1	--
Edgar	23.1	0.3	--	--	11.7	--	3.4	0.2	7.4	0.1
Ford	2.9	--	--	--	1.4	--	0.4	--	1.1	--
Fulton	104.7	0.6	--	--	53.3	--	14.5	1.0	34.4	0.9
Grundy	16.6	0.2	--	--	8.2	--	2.4	0.1	5.6	0.1
Hancock	64.3	0.7	--	--	31.9	--	9.3	0.7	21.3	0.4
Henderson	33.6	0.9	--	--	16.6	--	5.2	0.3	10.3	0.3
Henry	21.9	0.2	--	--	10.6	--	3.2	0.2	7.6	0.1
Iroquois	20.1	0.1	--	--	8.7	--	2.8	0.2	8.1	0.2
Jo Daviess	70.0	0.4	--	--	36.1	--	9.7	0.7	22.5	0.6
Kane	16.5	0.1	--	0.2	7.6	--	2.5	0.2	5.8	0.1
Kankakee	15.3	0.3	--	--	6.4	--	2.8	0.1	5.6	0.1
Kendall	6.4	--	--	--	3.0	--	1.0	--	2.4	--
Knox	49.5	0.3	--	--	25.3	--	6.9	0.4	16.2	0.4
Lake	0.9	--	--	--	0.6	--	0.1	--	0.2	--
La Salle	32.8	0.3	--	--	16.9	--	4.7	0.3	10.3	0.3
Lee	13.2	0.2	--	--	6.8	--	1.9	0.1	4.1	0.1
Livingston	10.5	0.1	--	--	4.6	--	1.7	0.1	3.9	0.1
Logan	9.0	--	--	--	4.2	--	1.3	0.1	3.3	0.1
Macon	7.9	0.1	--	0.1	3.6	--	1.2	0.1	2.8	--
Marshall	24.2	0.1	--	--	12.6	--	3.3	0.2	7.8	0.2
Mason	39.5	1.1	--	0.5	19.7	--	6.1	0.4	11.4	0.3
McDonough	34.3	0.4	--	--	17.1	--	5.1	0.3	11.3	0.1
McHenry	20.0	0.1	--	--	9.9	--	2.7	0.2	6.9	0.2
McLean	15.7	0.1	--	--	6.7	--	2.6	0.1	6.1	0.1
Menard	21.1	0.1	--	--	9.8	--	2.9	0.2	7.9	0.2
Mercer	33.6	0.3	--	--	17.0	--	4.8	0.3	10.9	0.3
Morgan	40.6	0.3	--	--	18.5	--	5.8	0.5	15.1	0.4
Moultrie	12.5	0.1	--	--	5.2	--	1.8	0.2	5.0	0.2
Ogle	29.8	0.1	--	--	15.4	--	4.1	0.3	9.5	0.4
Peoria	58.3	0.4	--	--	30.2	--	8.1	0.6	18.5	0.5
Piatt	3.8	--	--	--	2.1	--	0.5	--	1.2	--
Pike	119.8	1.0	--	--	56.4	--	17.1	1.4	42.8	1.1
Putnam	16.2	0.1	--	--	8.5	--	2.2	0.2	5.1	0.1
Rock Island	42.0	0.3	--	--	21.9	--	5.9	0.4	13.1	0.4
Sangamon	28.2	0.2	--	--	14.8	--	3.9	0.3	8.8	0.2
Schuyler	82.6	0.4	--	--	38.6	--	11.3	0.8	30.9	0.6
Scott	23.3	0.2	--	--	11.5	--	3.4	0.2	7.9	0.1
Stark	5.1	--	--	--	2.6	--	0.7	--	1.8	--
Stephenson	17.1	0.1	--	--	8.8	--	2.4	0.1	5.6	0.1
Tazewell	26.3	0.3	--	--	13.7	--	3.8	0.2	8.1	0.2
Vermilion	32.4	0.2	--	0.1	15.6	--	4.8	0.3	11.2	0.2
Warren	22.1	0.2	--	--	11.2	--	3.1	0.2	7.3	0.1
Whiteside	17.7	0.2	--	--	8.9	--	2.6	0.2	5.7	0.1
Will	29.3	0.3	--	0.3	12.0	--	4.9	0.2	11.5	0.1
Winnebago	20.4	0.1	--	--	10.4	--	2.8	0.2	6.7	0.2
Woodford	28.8	0.2	--	--	15.1	--	4.0	0.3	8.9	0.3
Total	1,700.6	15.1	--	1.6	840.6	--	245.3	16.7	568.4	12.9
All counties	4,029.9	20.2	45.5	13.3	2,025.0	137.8	685.8	34.8	1,046.4	21.1

Table 13.--Area of timberland by county and stand-size class, Illinois, 1985

(In thousand acres)

County	All stands	Stand-size class			
		Sawtimber	Poletimber	Sapling & seedling	Nonstocked
SOUTHERN UNIT					
Alexander	54.5	37.3	8.0	9.1	0.1
Franklin	45.8	27.9	9.5	8.2	0.2
Gallatin	44.0	25.8	11.2	6.9	0.1
Hamilton	39.6	22.8	8.6	7.8	0.4
Hardin	63.5	33.1	17.7	12.4	0.3
Jackson	130.8	83.8	26.8	19.7	0.5
Johnson	84.4	46.0	17.8	20.1	0.5
Massac	31.7	19.8	7.0	4.8	0.1
Perry	50.1	26.6	9.6	13.3	0.6
Pope	142.9	80.0	39.6	22.9	0.4
Pulaski	29.5	16.2	5.6	7.4	0.3
Randolph	78.6	43.2	15.9	18.6	0.9
Saline	50.3	26.0	13.8	10.0	0.5
Union	85.1	53.9	14.7	16.2	0.3
White	40.3	21.8	8.3	9.9	0.3
Williamson	80.6	40.3	17.2	22.1	1.0
Total	1,051.7	604.5	231.3	209.4	6.5
CLAYPAN UNIT					
Bond	29.6	18.3	5.8	5.4	0.1
Calhoun	65.2	43.0	10.9	11.1	0.2
Clark	61.5	44.4	10.0	7.1	--
Clay	48.4	30.6	8.4	9.2	0.2
Clinton	43.2	30.7	7.3	5.2	--
Crawford	49.3	35.0	8.2	6.1	--
Cumberland	33.7	19.7	6.6	7.3	0.1
Edwards	16.6	10.8	3.2	2.6	--
Effingham	50.8	32.6	9.6	8.6	--
Fayette	82.7	45.6	14.7	22.1	0.3
Greene	50.7	34.2	8.5	8.0	--
Jasper	33.4	19.9	6.7	6.7	0.1
Jefferson	69.1	48.0	11.2	9.9	--
Jersey	57.6	40.4	9.7	7.5	--
Lawrence	31.7	19.1	6.1	6.4	0.1
Macoupin	84.4	53.3	14.0	16.8	0.3
Madison	53.6	37.6	8.9	7.1	--
Marion	65.6	46.2	11.0	8.4	--
Monroe	50.2	34.4	8.6	7.2	--
Montgomery	39.4	27.4	6.7	5.3	--
Richland	30.5	19.0	5.3	6.1	0.1
St. Clair	51.0	33.0	9.2	8.6	0.2
Shelby	55.0	39.3	9.1	6.6	--
Wabash	12.2	7.8	2.3	2.1	--
Washington	50.6	35.0	8.4	7.2	--
Wayne	61.6	39.9	10.8	10.9	--
Total	1,277.6	845.2	221.2	209.5	1.7

(Table 13 continued on next page)

(Table 13 continued)

PRAIRIE UNIT

County	All stands	Stand-size class			
		Sawtimber	Poletimber	Sapling & seedling	Nonstocked
Adams	84.9	61.6	14.9	7.7	0.7
Boone	8.5	6.0	1.3	1.1	0.1
Brown	51.5	30.1	13.2	7.9	0.3
Bureau	35.6	17.5	9.8	8.2	0.1
Carroll	29.9	22.2	4.5	2.9	0.3
Cass	37.2	27.0	6.1	3.8	0.3
Champaign	7.9	4.2	1.7	1.9	0.1
Christian	19.7	11.1	4.6	3.8	0.2
Coles	25.7	15.1	6.4	4.1	0.1
Cook	4.3	3.2	0.3	0.8	--
De Kalb	4.7	3.5	0.6	0.6	--
De Witt	13.4	6.0	3.5	3.8	0.1
Douglas	6.8	3.9	1.8	1.1	--
Du Page	6.6	4.8	0.8	1.0	--
Edgar	23.1	14.1	5.6	3.3	0.1
Ford	2.9	2.0	0.3	0.6	--
Fulton	104.7	74.1	17.2	12.5	0.9
Grundy	16.6	11.2	2.9	2.4	0.1
Hancock	64.3	37.3	15.7	11.0	0.3
Henderson	33.6	23.9	5.9	3.5	0.3
Henry	21.9	12.8	4.7	4.3	0.1
Iroquois	20.1	12.2	2.9	4.8	0.2
Jo Daviess	70.0	50.9	11.1	7.4	0.6
Kane	16.5	8.7	3.9	3.8	0.1
Kankakee	15.3	7.3	3.6	4.3	0.1
Kendall	6.4	4.2	0.9	1.3	--
Knox	49.5	34.5	8.7	6.0	0.3
Lake	0.9	0.7	0.1	0.1	--
La Salle	32.8	23.2	5.7	3.6	0.3
Lee	13.2	9.7	2.0	1.4	0.1
Livingston	10.5	5.1	2.5	2.8	0.1
Logan	9.0	5.1	1.8	2.0	0.1
Macon	7.9	4.4	1.7	1.8	--
Marshall	24.2	18.0	3.7	2.3	0.2
Mason	39.5	28.2	7.4	3.5	0.4
McDonough	34.3	20.1	8.4	5.7	0.1
McHenry	20.0	14.2	2.8	2.8	0.2
McLean	15.7	7.1	3.7	4.8	0.1
Menard	21.1	13.1	3.6	4.2	0.2
Mercer	33.6	23.7	5.6	3.9	0.4
Morgan	40.6	22.5	8.3	9.4	0.4
Moultrie	12.5	6.1	2.5	3.7	0.2
Ogle	29.8	22.2	4.3	3.0	0.3
Peoria	58.3	41.4	10.1	6.3	0.5
Piatt	3.8	2.4	0.8	0.6	--
Pike	119.8	73.8	23.0	21.9	1.1
Putnam	16.2	11.7	2.7	1.7	0.1
Rock Island	42.0	30.5	7.1	4.0	0.4
Sangamon	28.2	20.0	5.0	3.0	0.2
Schuyler	82.6	54.7	12.8	14.5	0.6
Scott	23.3	13.7	5.5	4.0	0.1
Stark	5.1	3.7	0.7	0.7	--
Stephenson	17.1	12.6	2.5	1.9	0.1
Tazewell	26.3	18.8	4.6	2.7	0.2
Vermilion	32.4	19.3	7.2	5.6	0.3
Warren	22.1	15.1	4.0	2.9	0.1
Whiteside	17.7	12.7	2.9	2.0	0.1
Will	29.3	12.5	7.5	9.2	0.1
Winnebago	20.4	14.6	3.2	2.4	0.2
Woodford	28.8	21.3	4.6	2.6	0.3
Total	1,700.6	1,111.6	321.2	254.9	12.9
All counties	4,029.9	2,561.3	773.7	673.8	21.1

Table 14.--Area of timberland by county and site class, Illinois, 1985

(In thousand acres)

County	All classes	Site class (cubic feet of growth per acre per year) 165+	120-164	85-119	50-84	20-49
SOUTHERN UNIT						
Alexander	54.5	--	3.3	18.4	23.8	9.0
Franklin	45.8	--	4.5	16.6	18.4	6.3
Gallatin	44.0	--	4.0	15.5	18.0	6.5
Hamilton	39.6	--	3.8	14.6	15.6	5.6
Hardin	63.5	--	5.7	21.8	24.6	11.4
Jackson	130.8	--	13.0	43.9	55.2	18.7
Johnson	84.4	--	7.3	27.5	33.3	16.3
Massac	31.7	--	3.0	11.3	12.7	4.7
Perry	50.1	--	4.4	17.0	19.0	9.7
Pope	142.9	--	9.3	46.9	59.3	27.4
Pulaski	29.5	--	2.7	10.2	11.5	5.1
Randolph	78.6	--	7.2	27.8	29.9	13.7
Saline	50.3	--	4.2	17.9	19.7	8.5
Union	85.1	--	6.5	28.3	36.0	14.3
White	40.3	--	3.7	13.3	16.1	7.2
Williamson	80.6	--	7.1	27.1	29.4	17.0
Total	1,051.7	--	89.7	358.1	422.5	181.4
CLAYPAN UNIT						
Bond	29.6	--	2.8	11.6	12.4	2.8
Calhoun	65.2	--	5.6	25.1	27.8	6.7
Clark	61.5	--	4.8	23.5	26.7	6.5
Clay	48.4	--	3.9	18.3	21.2	5.0
Clinton	43.2	--	3.4	16.6	18.6	4.6
Crawford	49.3	--	4.0	19.0	21.1	5.2
Cumberland	33.7	--	3.5	13.2	14.3	2.7
Edwards	16.6	--	1.5	6.5	7.0	1.6
Effingham	50.8	--	4.7	19.9	21.2	5.0
Fayette	82.7	--	8.0	31.7	36.6	6.4
Greene	50.7	--	4.1	19.4	22.2	5.0
Jasper	33.4	--	3.4	13.2	13.9	2.9
Jefferson	69.1	--	5.5	26.4	30.2	7.0
Jersey	57.6	--	4.9	22.2	24.6	5.9
Lawrence	31.7	--	2.8	12.1	13.8	3.0
Macoupin	84.4	--	7.0	32.2	36.6	8.6
Madison	53.6	--	4.4	20.5	23.2	5.5
Marion	65.6	--	5.5	25.2	28.1	6.8
Monroe	50.2	--	4.2	19.2	21.7	5.1
Montgomery	39.4	--	3.3	15.3	16.7	4.1
Richland	30.5	--	2.6	11.6	13.4	2.9
St. Clair	51.0	--	4.3	19.7	21.9	5.1
Shelby	55.0	--	4.4	21.3	23.5	5.8
Wabash	12.2	--	1.1	4.8	5.2	1.1
Washington	50.6	--	4.3	19.4	21.9	5.0
Wayne	61.6	--	5.1	24.7	25.6	6.2
Total	1,277.6	--	109.1	492.6	549.4	126.5

(Table 14 continued on next page)

(Table 14 continued)

PRAIRIE UNIT

County	All classes	Site class (cubic feet of growth per acre per year) 165+	120-164	85-119	50-84	20-49
Adams	84.9	--	4.2	31.9	38.8	10.0
Boone	8.5	--	0.3	3.0	3.9	1.3
Brown	51.5	--	3.8	17.1	20.6	10.0
Bureau	35.6	--	2.5	11.3	14.7	7.1
Carroll	29.9	--	1.3	11.0	13.8	3.8
Cass	37.2	--	2.1	13.6	17.0	4.5
Champaign	7.9	--	0.3	2.5	3.5	1.6
Christian	19.7	--	1.1	6.4	7.8	4.4
Coles	25.7	--	1.9	8.4	10.4	5.0
Cook	4.3	--	0.2	0.8	2.7	0.6
De Kalb	4.7	--	0.2	1.6	2.2	0.7
De Witt	13.4	--	0.7	4.1	5.8	2.8
Douglas	6.8	--	0.5	2.2	2.8	1.3
Du Page	6.6	--	0.6	1.9	3.1	1.0
Edgar	23.1	--	1.8	7.6	9.5	4.2
Ford	2.9	--	0.1	0.9	1.2	0.7
Fulton	104.7	--	4.6	37.7	47.2	15.2
Grundy	16.6	--	0.9	5.7	7.3	2.7
Hancock	64.3	--	4.5	20.8	25.7	13.3
Henderson	33.6	--	2.3	11.8	15.1	4.4
Henry	21.9	--	1.4	6.8	8.8	4.9
Iroquois	20.1	--	0.7	6.0	8.3	5.1
Jo Daviess	70.0	--	3.1	25.6	32.1	9.2
Kane	16.5	--	0.9	5.2	6.8	3.6
Kankakee	15.3	--	1.0	4.7	6.3	3.3
Kendall	6.4	--	0.3	2.0	2.8	1.3
Knox	49.5	--	2.5	17.3	22.2	7.5
Lake	0.9	--	--	0.2	0.5	0.2
La Salle	32.8	--	1.7	11.8	14.7	4.6
Lee	13.2	--	0.6	4.8	6.0	1.8
Livingston	10.5	--	0.6	3.3	4.4	2.2
Logan	9.0	--	0.3	2.9	3.7	2.1
Macon	7.9	--	0.5	2.6	3.0	1.8
Marshall	24.2	--	1.0	9.1	11.3	2.8
Mason	39.5	--	2.9	14.5	17.6	4.5
McDonough	34.3	--	2.5	11.0	13.8	7.0
McHenry	20.0	--	0.7	6.8	9.1	3.4
McLean	15.7	--	0.6	4.7	6.8	3.6
Menard	21.1	--	0.9	6.7	8.8	4.7
Mercer	33.6	--	1.6	11.9	15.3	4.8
Morgan	40.6	--	1.7	12.4	16.1	10.4
Moultrie	12.5	--	0.4	3.7	4.6	3.8
Ogle	29.8	--	1.2	10.9	13.9	3.8
Peoria	58.3	--	2.8	21.3	26.5	7.7
Piatt	3.8	--	0.2	1.3	1.6	0.7
Pike	119.8	--	5.8	38.9	49.6	25.5
Putnam	16.2	--	0.7	6.0	7.4	2.1
Rock Island	42.0	--	2.1	15.5	19.2	5.2
Sangamon	28.2	--	1.5	10.0	12.7	4.0
Schuyler	82.6	--	3.4	27.1	35.4	16.7
Scott	23.3	--	1.6	7.6	9.4	4.7
Stark	5.1	--	0.2	1.7	2.3	0.9
Stephenson	17.1	--	0.7	6.1	7.9	2.4
Tazewell	26.3	--	1.4	9.6	12.1	3.2
Vermilion	32.4	--	1.7	11.1	14.2	5.4
Warren	22.1	--	1.2	7.6	9.8	3.5
Whiteside	17.7	--	0.9	6.3	8.1	2.4
Will	29.3	--	1.6	9.0	12.4	6.3
Winnebago	20.4	--	0.9	7.2	9.3	3.0
Woodford	28.8	--	1.2	10.9	13.3	3.4
Total	1,700.6	--	88.9	582.4	741.2	288.1
All counties	4,029.9	--	287.7	1,433.1	1,713.1	596.0

Table 15.--Area of timberland by county and stocking class of growing-stock trees, Illinois, 1985

(In thousand acres)

County	All classes	Stocking percent of growing stock trees: Less than 16.7	16.7-59.9	60.0-99.9	100.0-129.9	130.0+
SOUTHERN UNIT						
Alexander	54.5	0.1	1.2	19.1	28.6	5.5
Franklin	45.8	0.2	1.2	22.3	18.3	3.8
Gallatin	44.0	0.1	0.9	19.8	19.2	4.0
Hamilton	39.6	0.4	1.3	19.4	15.3	3.2
Hardin	63.5	0.3	2.8	26.2	27.9	6.3
Jackson	130.8	0.5	2.8	58.5	58.2	10.8
Johnson	84.4	0.5	5.1	38.9	33.5	6.4
Massac	31.7	0.1	0.7	13.9	13.9	3.1
Perry	50.1	0.6	2.9	22.7	19.6	4.3
Pope	142.9	0.4	5.8	51.2	66.8	18.7
Pulaski	29.5	0.3	1.4	13.1	12.0	2.7
Randolph	78.6	0.9	3.6	34.4	32.6	7.1
Saline	50.3	0.5	2.1	23.1	20.3	4.3
Union	85.1	0.3	2.7	33.2	40.5	8.4
White	40.3	0.3	1.6	21.3	14.4	2.7
Williamson	80.6	1.0	5.2	38.3	30.1	6.0
Total	1,051.7	6.5	41.3	455.4	451.2	97.3
CLAYPAN UNIT						
Bond	29.6	0.1	3.1	14.4	9.7	2.3
Calhoun	65.2	0.2	4.4	32.6	23.3	4.7
Clark	61.5	--	3.3	30.7	23.2	4.3
Clay	48.4	0.2	3.4	23.8	17.4	3.6
Clinton	43.2	--	2.9	21.5	15.9	2.9
Crawford	49.3	--	3.2	24.6	18.2	3.3
Cumberland	33.7	0.1	2.7	16.6	11.5	2.8
Edwards	16.6	--	1.6	8.1	5.6	1.3
Effingham	50.8	--	5.2	25.2	16.7	3.7
Fayette	82.7	0.3	6.4	40.9	27.4	7.7
Greene	50.7	--	3.6	25.3	17.9	3.9
Jasper	33.4	0.1	3.7	16.2	10.8	2.6
Jefferson	69.1	--	3.9	34.7	25.4	5.1
Jersey	57.6	--	3.6	28.8	21.2	4.0
Lawrence	31.7	0.2	3.7	15.1	10.2	2.5
Macoupin	84.4	0.3	6.9	42.0	28.9	6.3
Madison	53.6	--	3.2	26.8	19.7	3.9
Marion	65.6	--	4.1	32.8	24.1	4.6
Monroe	50.2	--	4.0	24.8	17.9	3.5
Montgomery	39.4	--	2.7	19.6	14.2	2.9
Richland	30.5	0.1	2.1	15.1	10.7	2.5
St. Clair	51.0	0.1	4.9	25.0	17.2	3.8
Shelby	55.0	--	3.3	27.5	20.5	3.7
Wabash	12.2	--	1.2	6.0	4.1	0.9
Washington	50.6	--	2.9	25.3	18.6	3.8
Wayne	61.6	--	5.8	31.3	20.1	4.4
Total	1,277.6	1.7	95.8	634.7	450.4	95.0

(Table 15 continued on next page)

(Table 15 continued)

PRAIRIE UNIT

County	All classes	Stocking percent of growing stock trees: Less than 16.7	16.7-59.9	60.0-99.9	100.0-129.9	130.0+
Adams	84.9	0.7	15.8	42.8	23.2	2.4
Boone	8.5	0.1	1.9	4.2	2.1	0.2
Brown	51.5	0.3	8.6	27.1	14.3	1.2
Bureau	35.6	0.1	7.7	18.7	8.4	0.7
Carroll	29.9	0.3	6.3	14.6	7.9	0.8
Cass	37.2	0.3	7.1	18.3	10.1	1.4
Champaign	7.9	0.1	2.5	3.8	1.4	0.1
Christian	19.7	0.2	4.4	9.9	4.7	0.5
Coles	25.7	0.1	4.7	13.4	7.0	0.5
Cook	4.3	--	2.9	1.1	0.3	--
De Kalb	4.7	--	1.4	2.1	1.1	0.1
De Witt	13.4	0.1	3.6	6.8	2.6	0.3
Douglas	6.8	--	1.3	3.6	1.8	0.1
Du Page	6.6	--	1.7	2.8	1.6	0.5
Edgar	23.1	0.1	4.2	12.0	6.4	0.4
Ford	2.9	--	1.2	1.2	0.5	--
Fulton	104.7	0.9	22.2	51.7	27.1	2.8
Grundy	16.6	0.1	3.5	8.1	4.4	0.5
Hancock	64.3	0.3	12.1	33.1	17.3	1.5
Henderson	33.6	0.3	6.0	16.3	9.5	1.5
Henry	21.9	0.1	5.5	10.5	5.3	0.5
Iroquois	20.1	0.2	6.2	9.1	4.2	0.4
Jo Daviess	70.0	0.6	14.7	34.6	18.3	1.8
Kane	16.5	0.2	4.3	8.3	3.4	0.3
Kankakee	15.3	0.1	4.3	7.4	3.0	0.5
Kendall	6.4	--	1.9	3.0	1.4	0.1
Knox	49.5	0.3	10.4	24.7	13.0	1.1
Lake	0.9	-	0.6	0.2	0.1	--
La Salle	32.8	0.3	6.8	16.1	8.7	0.9
Lee	13.2	0.1	3.1	6.3	3.3	0.4
Livingston	10.5	0.1	3.1	5.1	2.0	0.2
Logan	9.0	0.1	2.6	4.4	1.7	0.2
Macon	7.9	--	2.0	3.8	1.9	0.2
Marshall	24.2	0.2	4.9	11.9	6.5	0.7
Mason	39.5	0.3	6.2	19.8	11.4	1.8
McDonough	34.3	0.2	6.4	17.7	9.3	0.7
McHenry	20.0	0.2	5.2	9.5	4.7	0.4
McLean	15.7	0.1	5.2	7.6	2.5	0.3
Menard	21.1	0.2	5.2	10.2	5.0	0.5
Mercer	33.6	0.3	7.2	16.5	8.7	0.9
Morgan	40.6	0.4	10.8	20.0	8.5	0.9
Moultrie	12.5	0.2	3.8	6.0	2.1	0.4
Ogle	29.8	0.3	6.7	14.3	7.7	0.8
Peoria	58.3	0.5	11.5	29.3	15.5	1.5
Piatt	3.8	--	0.9	1.9	0.9	0.1
Pike	119.8	1.1	27.1	60.0	28.9	2.7
Putnam	16.2	0.2	3.3	8.0	4.3	0.4
Rock Island	42.0	0.4	8.1	21.0	11.3	1.2
Sangamon	28.2	0.2	6.0	13.8	7.5	0.7
Schuyler	82.6	0.6	19.2	40.6	20.6	1.6
Scott	23.3	0.1	4.4	11.9	6.3	0.6
Stark	5.1	--	1.4	2.4	1.2	0.1
Stephenson	17.1	0.1	4.1	8.2	4.3	0.4
Tazewell	26.3	0.2	5.4	12.9	7.0	0.8
Vermilion	32.4	0.2	6.6	16.8	8.1	0.7
Warren	22.1	0.1	4.7	10.9	5.9	0.5
Whiteside	17.7	0.1	3.9	8.6	4.6	0.5
Will	29.3	0.1	8.1	14.7	5.7	0.7
Winnebago	20.4	0.2	4.6	9.9	5.2	0.5
Woodford	28.8	0.3	5.8	14.3	7.6	0.8
Total	1,700.6	12.9	371.3	843.8	429.3	43.3
All counties	4,029.9	21.1	508.4	1,933.9	1,330.9	235.6

Table 16.--Area of timberland by forest type and ownership class, Illinois, 1985

(In thousand acres)

Forest type	All owners	Ownership class							
		National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. priv.-corp.	Misc. priv.-indiv.
White pine	20.2	3.1	--	3.5	--	--	7.6	--	6.0
Loblolly-shortleaf pine	45.5	37.5	4.0	--	--	--	--	4.0	--
Oak-pine	13.3	2.7	--	--	--	--	--	4.2	6.4
Oak-hickory	2,025.0	154.3	15.5	23.0	7.4	7.9	901.4	103.9	811.6
Oak-gum-cypress	137.8	7.3	--	4.0	--	--	34.1	10.3	82.1
Elm-ash-soft maple	685.8	10.0	27.6	17.9	15.6	2.8	321.8	59.4	230.7
Cottonwood	34.8	--	4.0	--	--	--	14.6	8.7	7.5
Maple-beech	1,046.4	10.9	15.2	6.3	18.8	2.3	539.6	66.2	387.1
Nonstocked	21.1	--	--	--	--	--	8.9	6.4	5.8
All types	4,029.9	225.8	66.3	54.7	41.8	13.0	1,828.0	263.1	1,537.2

Table 17.--Area of timberland by ownership class and site class, Illinois, 1985

(In thousand acres)

Ownership class	All classes	Site class (cubic feet of growth per acre per year)				
		165+	120-164	85-119	50-84	20-49
National Forest	225.8	--	11.6	66.4	100.9	46.9
Miscellaneous federal	66.3	--	3.9	27.0	31.8	3.6
State	54.7	--	3.5	27.3	14.4	9.5
County and municipal	41.8	--	3.6	14.9	19.3	4.0
Forest industry	13.0	--	--	7.9	2.8	2.3
Farmer	1,828.0	--	117.7	633.6	803.8	272.9
Misc. private-corporation	263.1	--	18.9	81.8	97.3	65.1
Misc. private-individual	1,537.2	--	128.5	574.2	642.8	191.7
All owners	4,029.9	--	287.7	1,433.1	1,713.1	596.0

Table 18.--Area of privately owned timberland by ownership class, owner tenure, and size of holding, Illinois, 1985

(In thousand acres)

Ownership class and owner tenure class	All sizes	Size of holding (acres) 1-4	5-10	11-20	21-50	51-100	101-500	501-2,500	2,501-5,000	5001+
Forest industry										
1-4 years	--	--	--	--	--	--	--	--	--	--
5-9 years	--	--	--	--	--	--	--	--	--	--
10-19 years	13.0	--	--	--	--	--	3.9	4.0	--	5.1
20+ years	--	--	--	--	--	--	--	--	--	--
All classes	13.0	--	--	--	--	--	3.9	4.0	--	5.1
Farmer										
1-4 years	98.6	14.3	4.0	11.3	20.1	11.7	37.2	--	--	--
5-9 years	405.6	--	15.5	34.7	126.6	101.1	108.4	19.3	--	--
10-19 years	693.7	7.4	35.1	67.6	158.5	148.7	257.2	19.2	--	--
20+ years	630.1	3.9	12.1	57.3	141.0	192.9	196.0	20.4	2.9	3.6
All classes	1,828.0	25.6	66.7	170.9	446.2	454.4	598.8	58.9	2.9	3.6
Misc. priv.-corporation										
1-4 years	3.6	--	--	--	--	--	--	3.6	--	--
5-9 years	52.7	--	3.7	--	3.9	7.4	21.2	13.7	--	2.8
10-19 years	94.4	--	3.9	9.8	3.6	14.8	27.1	15.0	3.5	16.7
20+ years	112.4	--	--	--	7.8	3.5	22.6	47.5	3.9	27.1
All classes	263.1	--	7.6	9.8	15.3	25.7	70.9	79.8	7.4	46.6
Misc. priv.-individual										
1-4 years	103.2	3.9	15.8	16.0	33.6	10.4	23.5	--	--	--
5-9 years	346.4	15.1	38.7	27.9	113.3	84.1	56.4	7.0	3.9	--
10-19 years	574.7	28.4	52.6	60.9	186.7	138.8	100.3	7.0	--	--
20+ years	512.9	13.3	17.6	44.0	142.2	123.6	143.6	28.6	--	--
All classes	1,537.2	60.7	124.7	148.8	475.8	356.9	323.8	42.6	3.9	--
All private owners										
1-4 years	205.4	18.2	19.8	27.3	53.7	22.1	60.7	3.6	--	--
5-9 years	804.7	15.1	57.9	62.6	243.8	192.6	186.0	40.0	3.9	2.8
10-19 years	1,375.8	35.8	91.6	138.3	348.8	302.3	388.5	45.2	3.5	21.8
20+ years	1,255.4	17.2	29.7	101.3	291.0	320.0	362.2	96.5	6.8	30.7
All classes	3,641.3	86.3	199.0	329.5	937.3	837.0	997.4	185.3	14.2	55.3

Table 19.--Area of timberland by ownership class and stocking class of growing-stock trees, Illinois, 1985

(In thousand acres)

Ownership class	All classes	Stocking percent of growing stock trees Less than 16.7	16.7-59.9	60.0-99.9	100.0-129.9	130.0+
National Forest	225.8	--	7.9	68.0	121.8	28.1
Miscellaneous federal	66.3	--	3.5	22.3	18.1	22.4
State	54.7	--	--	14.0	33.2	7.5
County and municipal	41.8	--	--	12.0	29.8	--
Forest industry	13.0	--	2.3	6.7	4.0	--
Farmer	1,828.0	8.9	300.0	954.0	482.8	82.3
Misc. private-corporation	263.1	6.4	19.2	123.3	111.4	2.8
Misc. private-individual	1,537.2	5.8	175.5	733.6	529.8	92.5
All owners	4,029.9	21.1	508.4	1,933.9	1,330.9	235.6

Table 20.--Area of timberland by forest type and stand-size class, Illinois, 1985

(In thousand acres)

Forest type	All stands	Stand-size class			
		Sawtimber	Poletimber	Sapling & seedling	Nonstocked
White pine	20.2	7.5	9.6	3.1	--
Loblolly-shortleaf pine	45.5	13.8	23.8	7.9	--
Oak-pine	13.3	1.7	5.2	6.4	--
Oak-hickory	2,025.0	1,456.3	357.1	211.6	--
Oak-gum-cypress	137.8	109.4	17.4	11.0	--
Elm-ash-soft maple	685.8	457.9	150.1	77.8	--
Cottonwood	34.8	19.0	2.9	12.9	--
Maple-beech	1,046.4	495.7	207.6	343.1	--
Nonstocked	21.1	--	--	--	21.1
All types	4,029.9	2,561.3	773.7	673.8	21.1

Table 21.--Area of timberland by ownership class and stand volume class, Illinois, 1985

(In thousand acres)

Ownership class	All classes	Stand-volume class (board feet[1/])		
		Less than 1,500	1,500 to 5,000	5,000+
National Forest	225.8	50.3	83.4	92.1
Miscellaneous federal	66.3	12.0	22.8	31.5
State	54.7	17.7	10.5	26.5
County and municipal	41.8	10.9	3.6	27.3
Forest industry	13.0	2.3	6.7	4.0
Farmer	1,828.0	540.4	770.6	517.0
Misc. private-corporation	263.1	86.0	104.9	72.2
Misc. private-individual	1,537.2	451.2	574.2	511.8
All owners	4,029.9	1,170.8	1,576.7	1,282.4

[1/] International 1/4-inch rule.

Table 22.--Area of timberland by forest type, stand-size class, and ownership class, Illinois, 1985

(In thousand acres)

Forest type and stand-size class	All owners	Ownership class							
		National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. priv.-corp.	Misc. priv.-indiv.
White pine									
Sawtimber	7.5	--	--	3.5	--	--	--	--	4.0
Poletimber	9.6	--	--	--	--	--	7.6	--	2.0
Sapling & seedling	3.1	3.1	--	--	--	--	--	--	--
All stands	20.2	3.1	--	3.5	--	--	7.6	--	6.0
Loblolly-shortleaf pine									
Sawtimber	13.8	5.8	4.0	--	--	--	--	4.0	--
Poletimber	23.8	23.8	--	--	--	--	--	--	--
Sapling & seedling	7.9	7.9	--	--	--	--	--	--	--
All stands	45.5	37.5	4.0	--	--	--	--	4.0	--
Oak-pine									
Sawtimber	1.7	0.1	--	--	--	--	--	1.6	--
Poletimber	5.2	2.6	--	--	--	--	--	2.6	--
Sapling & seedling	6.4	--	--	--	--	--	--	--	6.4
All stands	13.3	2.7	--	--	--	--	--	4.2	6.4
Oak-hickory									
Sawtimber	1,456.3	114.7	7.6	18.4	7.4	7.9	655.3	64.3	580.7
Poletimber	357.1	29.9	4.0	--	--	--	171.6	21.6	130.0
Sapling & seedling	211.6	9.7	3.9	4.6	--	--	74.5	18.0	100.9
All stands	2,025.0	154.3	15.5	23.0	7.4	7.9	901.4	103.9	811.6
Oak-gum-cypress									
Sawtimber	109.4	4.9	--	4.0	--	--	30.5	10.3	59.7
Poletimber	17.4	2.4	--	--	--	--	--	--	15.0
Sapling & seedling	11.0	--	--	--	--	--	3.6	--	7.4
All stands	137.8	7.3	--	4.0	--	--	34.1	10.3	82.1
Elm-ash-soft maple									
Sawtimber	457.9	10.0	19.5	7.2	8.0	2.8	216.0	34.9	159.5
Poletimber	150.1	--	--	--	7.6	--	78.0	15.3	49.2
Sapling & seedling	77.8	--	8.1	10.7	--	--	27.8	9.2	22.0
All stands	685.8	10.0	27.6	17.9	15.6	2.8	321.8	59.4	230.7
Cottonwood									
Sawtimber	19.0	--	4.0	--	--	--	7.5	--	7.5
Poletimber	2.9	--	--	--	--	--	--	2.9	--
Sapling & seedling	12.9	--	--	--	--	--	7.1	5.8	--
All stands	34.8	--	4.0	--	--	--	14.6	8.7	7.5
Maple-beech									
Sawtimber	495.7	1.7	3.9	3.9	11.9	--	267.6	26.7	180.0
Poletimber	207.6	1.3	8.4	--	4.0	--	102.7	14.6	76.6
Sapling & seedling	343.1	7.9	2.9	2.4	2.9	2.3	169.3	24.9	130.5
All stands	1,046.4	10.9	15.2	6.3	18.8	2.3	539.6	66.2	387.1
Nonstocked	21.1	--	--	--	--	--	8.9	6.4	5.8
All types									
Sawtimber	2,561.3	137.2	39.0	37.0	27.3	10.7	1,176.9	141.8	991.4
Poletimber	773.7	60.0	12.4	--	11.6	--	359.9	57.0	272.8
Sapling & seedling	673.8	28.6	14.9	17.7	2.9	2.3	282.3	57.9	267.2
Nonstocked	21.1	--	--	--	--	--	8.9	6.4	5.8
All stands	4,029.9	225.8	66.3	54.7	41.8	13.0	1,828.0	263.1	1,537.2

Table 23.--Area of timberland by forest type and Forest Survey Unit, Illinois, 1985

(In thousand acres)

Forest type	All Units	Forest Survey Unit		
		Southern Unit	Claypan Unit	Prairie Unit
White pine	20.2	3.1	2.0	15.1
Loblolly-shortleaf pine	45.5	45.5	--	--
Oak-pine	13.3	11.7	--	1.6
Oak-hickory	2,025.0	483.9	700.5	840.6
Oak-gum-cypress	137.8	82.3	55.5	--
Elm-ash-soft maple	685.8	182.1	258.4	245.3
Cottonwood	34.8	11.0	7.1	16.7
Maple-beech	1,046.4	225.6	252.4	568.4
Nonstocked	21.1	6.5	1.7	12.9
All types	4,029.9	1,051.7	1,277.6	1,700.6

Table 24.--Area of timberland by forest type, stand-size class, and site class, Illinois, 1985

(In thousand acres)

Forest type and stand-size class	All classes	Site class (cubic feet of growth per acre per year)				
		165+	120-164	85-119	50-84	20-49
White pine						
Sawtimber	7.5	--	3.5	4.0	--	--
Poletimber	9.6	--	3.8	--	2.0	3.8
Sapling & seedling	3.1	--	3.1	--	--	--
All stands	20.2	--	10.4	4.0	2.0	3.8
Loblolly-shortleaf pine						
Sawtimber	13.8	--	--	--	10.9	2.9
Poletimber	23.8	--	--	6.0	11.8	6.0
Sapling & seedling	7.9	--	--	--	--	7.9
All stands	45.5	--	--	6.0	22.7	16.8
Oak-pine						
Sawtimber	1.7	--	0.1	1.6	--	--
Poletimber	5.2	--	0.8	--	0.9	3.5
Sapling & seedling	6.4	--	--	6.4	--	--
All stands	13.3	--	0.9	8.0	0.9	3.5
Oak-hickory						
Sawtimber	1,456.3	--	50.9	480.4	735.5	189.5
Poletimber	357.1	--	22.1	130.5	185.5	19.0
Sapling & seedling	211.6	--	7.1	75.6	110.1	18.8
All stands	2,025.0	--	80.1	686.5	1,031.1	227.3
Oak-gum-cypress						
Sawtimber	109.4	--	34.4	38.1	23.7	13.2
Poletimber	17.4	--	8.1	--	6.4	2.9
Sapling & seedling	11.0	--	--	--	3.6	7.4
All stands	137.8	--	42.5	38.1	33.7	23.5
Elm-ash-soft maple						
Sawtimber	457.9	--	103.3	170.2	126.1	58.3
Poletimber	150.1	--	38.9	55.9	51.4	3.9
Sapling & seedling	77.8	--	7.6	39.2	23.4	7.6
All stands	685.8	--	149.8	265.3	200.9	69.8
Cottonwood						
Sawtimber	19.0	--	--	11.6	3.9	3.5
Poletimber	2.9	--	--	--	--	2.9
Sapling & seedling	12.9	--	--	--	3.5	9.4
All stands	34.8	--	--	11.6	7.4	15.8
Maple-beech						
Sawtimber	495.7	--	--	211.0	197.0	87.7
Poletimber	207.6	--	--	102.0	81.4	24.2
Sapling & seedling	343.1	--	--	98.9	127.0	117.2
All stands	1,046.4	--	--	411.9	405.4	229.1
Nonstocked	21.1	--	4.0	1.7	9.0	6.4
All types						
Sawtimber	2,561.3	--	192.2	916.9	1,097.1	355.1
Poletimber	773.7	--	73.7	294.4	339.4	66.2
Sapling & seedling	673.8	--	17.8	220.1	267.6	168.3
Nonstocked	21.1	--	4.0	1.7	9.0	6.4
All stands	4,029.9	--	287.7	1,433.1	1,713.1	596.0

Table 25.--Area of timberland by stand-age class and forest type, Illinois, 1985

(In thousand acres)

Forest type	All ages	Stand-age class (years)												
		1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-120	121-140	141+
White pine	20.2	--	3.1	9.6	4.0	3.5	--	--	--	--	--	--	--	--
Loblolly-shortleaf pine	45.5	--	7.9	21.9	2.9	2.9	5.9	--	4.0	--	--	--	--	--
Oak-pine	13.3	3.5	2.9	6.0	--	--	0.9	--	--	--	--	--	--	--
Oak-hickory	2,025.0	94.0	117.6	61.6	118.7	186.2	108.0	224.9	335.3	204.5	221.4	197.7	112.4	42.7
Oak-gum-cypress	137.8	3.6	7.4	16.0	11.2	17.0	20.3	10.4	26.0	11.7	2.8	7.4	--	4.0
Elm-ash-soft maple	685.8	39.7	38.5	61.6	120.4	74.5	57.4	88.4	95.6	50.7	44.0	11.0	4.0	--
Cottonwood	34.8	4.6	8.3	2.9	--	3.9	4.0	7.6	--	3.5	--	--	--	--
Maple-beech	1,046.4	173.4	156.9	111.9	93.6	69.2	87.1	98.9	79.9	62.9	39.6	56.9	16.1	--
Nonstocked	21.1	21.1	--	--	--	--	--	--	--	--	--	--	--	--
All types	4,029.9	339.9	342.6	291.5	350.8	357.2	283.6	430.2	540.8	333.3	307.8	273.0	132.5	46.7

Table 26.--Area of timberland by forest type, site-index class, and Forest Survey Unit, Illinois, 1985

(In thousand acres)

Forest type	All classes	Site-index class (feet)								
		11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91+
All units										
White pine	20.2	--	--	--	--	3.8	2.0	--	7.1	7.3
Loblolly-shortleaf pine	45.5	--	--	7.9	--	17.7	19.9	--	--	--
Oak-pine	13.3	--	--	--	3.5	0.9	3.5	4.5	--	0.9
Oak-hickory	2,025.0	--	--	8.4	111.2	291.3	556.0	580.8	359.3	118.0
Oak-gum-cypress	137.8	--	--	--	10.3	13.2	16.2	28.9	22.7	46.5
Elm-ash-soft maple	685.8	--	--	3.8	3.6	59.9	94.4	173.0	171.7	179.4
Cottonwood	34.8	--	--	2.3	--	3.5	13.5	3.9	3.6	8.0
Maple-beech	1,046.4	--	--	12.3	19.7	94.9	250.7	256.9	266.0	145.9
Nonstocked	21.1	--	--	--	4.0	--	11.4	--	1.7	4.0
All types	4,029.9	--	--	34.7	152.3	485.2	967.6	1,048.0	832.1	510.0
Southern Unit										
White pine	3.1	--	--	--	--	--	--	--	3.1	--
Loblolly-shortleaf pine	45.5	--	--	7.9	--	17.7	19.9	--	--	--
Oak-pine	11.7	--	--	--	3.5	0.9	3.5	2.9	--	0.9
Oak-hickory	483.9	--	--	3.6	16.3	83.0	122.9	129.6	87.5	41.0
Oak-gum-cypress	82.3	--	--	--	10.3	9.6	9.1	10.3	8.0	35.0
Elm-ash-soft maple	182.1	--	--	--	--	27.4	24.6	42.0	37.1	51.0
Cottonwood	11.0	--	--	2.3	--	--	8.7	--	--	--
Maple-beech	225.6	--	--	4.0	2.4	12.7	62.8	33.4	54.5	55.8
Nonstocked	6.5	--	--	--	--	--	6.5	--	--	--
All types	1,051.7	--	--	17.8	32.5	151.3	258.0	218.2	190.2	183.7
Claypan Unit										
White pine	2.0	--	--	--	--	--	2.0	--	--	--
Loblolly-shortleaf pine	--	--	--	--	--	--	--	--	--	--
Oak-pine	--	--	--	--	--	--	--	--	--	--
Oak-hickory	700.5	--	--	--	33.4	96.2	190.1	214.5	112.9	53.4
Oak-gum-cypress	55.5	--	--	--	--	3.6	7.1	18.6	14.7	11.5
Elm-ash-soft maple	258.4	--	--	--	3.6	15.2	36.8	65.7	76.0	61.1
Cottonwood	7.1	--	--	--	--	3.5	--	--	3.6	--
Maple-beech	252.4	--	--	--	8.7	7.1	56.7	79.1	63.4	37.4
Nonstocked	1.7	--	--	--	--	--	--	--	1.7	--
All types	1,277.6	--	--	--	45.7	125.6	292.7	377.9	272.3	163.4
Prairie Unit										
White pine	15.1	--	--	--	--	3.8	--	--	4.0	7.3
Loblolly-shortleaf pine	--	--	--	--	--	--	--	--	--	--
Oak-pine	1.6	--	--	--	--	--	--	1.6	--	--
Oak-hickory	840.6	--	--	4.8	61.5	112.1	243.0	236.7	158.9	23.6
Oak-gum-cypress	--	--	--	--	--	--	--	--	--	--
Elm-ash-soft maple	245.3	--	--	3.8	--	17.3	33.0	65.3	58.6	67.3
Cottonwood	16.7	--	--	--	--	--	4.8	3.9	--	8.0
Maple-beech	568.4	--	--	8.3	8.6	75.1	131.2	144.4	148.1	52.7
Nonstocked	12.9	--	--	--	4.0	--	4.9	--	--	4.0
All types	1,700.6	--	--	16.9	74.1	208.3	416.9	451.9	369.6	162.9

Table 27.--Area of timberland by forest type, stand-size class, and basal-area class, Illinois, 1985

(In thousand acres)

Forest type and stand-size class	All classes	Basal area class (square feet per acre)													
		0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-120	121-150	151-180	181+
White pine															
Sawtimber	7.5	--	--	--	--	--	--	--	--	--	--	4.0	3.5	--	--
Poletimber	9.6	--	--	--	--	--	--	--	2.0	--	--	3.8	3.8	--	--
Sapling & seedling	3.1	--	--	--	--	--	--	--	--	3.1	--	--	--	--	--
All stands	20.2	--	--	--	--	--	--	--	2.0	3.1	--	7.8	7.3	--	--
Loblolly-shortleaf pine															
Sawtimber	13.8	--	--	--	--	--	--	--	--	4.0	--	4.0	5.8	--	--
Poletimber	23.8	--	--	--	--	--	--	--	5.9	--	--	11.9	--	--	6.0
Sapling & seedling	7.9	--	--	--	7.9	--	--	--	--	--	--	--	--	--	--
All stands	45.5	--	--	--	7.9	--	--	--	5.9	4.0	--	15.9	5.8	--	6.0
Oak-pine															
Sawtimber	1.7	--	--	--	--	--	--	--	--	--	--	1.7	--	--	--
Poletimber	5.2	--	--	--	--	--	--	--	--	--	--	2.6	2.6	--	--
Sapling & seedling	6.4	--	--	--	--	--	2.9	--	3.5	--	--	--	--	--	--
All stands	13.3	--	--	--	--	--	2.9	--	3.5	--	--	4.3	2.6	--	--
Oak-hickory															
Sawtimber	1,456.3	--	--	14.4	12.2	55.5	123.4	113.6	284.4	243.3	149.9	333.2	113.8	12.6	--
Poletimber	357.1	--	--	--	--	39.2	54.9	25.4	97.5	58.1	33.5	44.7	3.8	--	--
Sapling & seedling	211.6	8.0	30.4	25.4	13.4	61.1	52.2	12.8	3.7	4.6	--	--	--	--	--
All stands	2,025.0	8.0	30.4	39.8	25.6	155.8	230.5	151.8	385.6	306.0	183.4	377.9	117.6	12.6	--
Oak-gum-cypress															
Sawtimber	109.4	--	--	--	3.5	6.8	6.4	15.0	16.7	7.9	--	35.4	13.7	--	4.0
Poletimber	17.4	--	--	--	--	4.1	--	4.0	--	4.0	--	2.9	2.4	--	--
Sapling & seedling	11.0	--	--	7.4	--	--	--	--	--	3.6	--	--	--	--	--
All stands	137.8	--	--	7.4	3.5	10.9	6.4	19.0	16.7	15.5	--	38.3	16.1	--	4.0
Elm-ash-soft maple															
Sawtimber	457.9	--	--	--	7.0	18.8	43.6	34.3	58.3	55.2	55.5	80.3	81.3	20.0	3.6
Poletimber	150.1	--	--	--	8.0	--	27.4	14.9	23.1	29.5	7.6	39.6	--	--	--
Sapling & seedling	77.8	--	14.4	13.3	3.9	9.9	13.4	12.8	6.3	--	3.8	--	--	--	--
All stands	685.8	--	14.4	13.3	18.9	28.7	84.4	62.0	87.7	84.7	66.9	119.9	81.3	20.0	3.6
Cottonwood															
Sawtimber	19.0	--	--	--	3.5	--	--	--	--	--	--	3.6	7.9	--	4.0
Poletimber	2.9	--	--	--	--	--	2.9	--	--	--	--	--	--	--	--
Sapling & seedling	12.9	--	4.8	4.6	--	--	3.5	--	--	--	--	--	--	--	--
All stands	34.8	--	4.8	4.6	3.5	--	6.4	--	--	--	--	3.6	7.9	--	4.0
Maple-beech															
Sawtimber	495.7	--	--	10.0	7.1	40.4	67.6	35.9	97.4	60.3	40.5	108.8	27.7	--	--
Poletimber	207.6	--	--	4.0	7.4	23.9	24.9	23.6	36.7	39.7	14.7	32.7	--	--	--
Sapling & seedling	343.1	24.6	43.8	51.9	50.5	60.2	59.8	5.2	34.2	12.9	--	--	--	--	--
All stands	1,046.4	24.6	43.8	65.9	65.0	124.5	152.3	64.7	168.3	112.9	55.2	141.5	27.7	--	--
Nonstocked	21.1	1.7	2.4	9.0	4.0	--	4.0	--	--	--	--	--	--	--	--
All types															
Sawtimber	2,561.3	--	--	24.4	33.3	121.5	241.0	198.8	456.8	370.7	245.9	571.0	253.7	32.6	11.6
Poletimber	773.7	--	--	4.0	15.4	67.2	110.1	67.9	165.2	131.3	55.8	138.2	12.6	--	6.0
Sapling & seedling	673.8	32.6	93.4	102.6	75.7	131.2	131.8	30.8	47.7	24.2	3.8	--	--	--	--
Nonstocked	21.1	1.7	2.4	9.0	4.0	--	4.0	--	--	--	--	--	--	--	--
All stands	4,029.9	34.3	95.8	140.0	128.4	319.9	486.9	297.5	669.7	526.2	305.5	709.2	266.3	32.6	17.6

Table 28.--Area of timberland by stocking class based on selected stand components, Illinois, 1985

(In thousand acres)

Stocking class (percent)	Stocking classified in terms of:		
	All live trees	Growing-stock trees	Rough and rotten trees
0-10	--	--	1,731.2
11-20	--	29.4	1,059.8
21-30	--	24.0	616.1
31-40	30.0	74.8	348.9
41-50	49.4	165.4	161.8
51-60	66.5	235.9	62.5
61-70	112.7	360.1	28.3
71-80	242.2	328.0	5.1
81-90	388.3	571.0	3.4
91-100	494.2	674.8	4.0
101-110	689.6	554.3	8.8
111-120	751.1	478.5	--
121-130	622.9	298.1	--
131-140	396.7	163.1	--
141-150	155.8	54.3	--
151-160	20.5	12.2	--
161+	10.0	6.0	--
All classes	4,029.9	4,029.9	4,029.9

Table 29.--Area of timberland in plantations by forest type and stand-age class, Illinois, 1985

(In thousand acres)

Forest type	All ages	Stand-age class (years)								
		1-10	11-20	21-30	31-40	41-50	50-60	61-70	71-80	81+
White pine	20.2	--	3.1	9.6	4.0	3.5	--	--	--	--
Loblolly-shortleaf	33.6	--	7.9	15.9	2.9	2.9	--	--	4.0	--
Oak-pine	2.6	--	--	2.6	--	--	--	--	--	--
Maple-beech	2.3	2.3	--	--	--	--	--	--	--	--
All types	58.7	2.3	11.0	28.1	6.9	6.4	--	--	4.0	--

Table 30.--Area of timberland by class of water and distance to water, Illinois, 1985

(In thousand acres)

Class and width or size of water	All distances	Distance to water (miles)						
		0-.125	.125-.25	.25-1.0	1.0-2.5	2.5-5.0	5.0-10.0	10.0+
Streams								
1-16 feet	198.4	125.7	33.4	31.3	8.0	--	--	--
17-33 feet	1,458.0	799.5	203.1	371.2	70.7	13.5	--	--
34-66 feet	431.6	237.8	45.3	131.0	9.4	8.1	--	--
67+ feet	583.4	197.4	54.5	161.1	114.6	55.8	--	--
All widths	2,671.4	1,360.4	336.3	694.6	202.7	77.4	--	--
Lakes								
1-25 acres	126.7	32.7	14.5	53.5	17.9	8.1	--	--
26-100 acres	125.6	22.9	24.4	41.5	24.8	12.0	--	--
101-500 acres	65.3	3.9	6.7	19.9	19.2	15.6	--	--
501+ acres	105.4	23.6	23.6	22.8	15.8	19.6	--	--
All sizes	423.0	83.1	69.2	137.7	77.7	55.3	--	--
Swamps								
1-10 acres	25.4	12.1	8.1	5.2	--	--	--	--
11-25 acres	3.6	--	--	--	--	3.6	--	--
26-100 acres	11.8	10.0	1.8	--	--	--	--	--
101+ acres	2.9	--	--	--	2.9	--	--	--
All sizes	43.7	22.1	9.9	5.2	2.9	3.6	--	--
Farm ponds								
1-2 acres	590.4	125.7	90.1	239.2	111.5	23.9	--	--
3-5 acres	155.3	19.5	18.7	95.2	19.0	--	2.9	--
6+ acres	146.1	17.6	30.4	36.2	38.7	16.3	6.9	--
All sizes	891.8	162.8	139.2	370.6	169.2	40.2	9.8	--
All water	4,029.9	1,628.4	554.6	1,208.1	452.5	176.5	9.8	--

Table 31.--Area of timberland by Forest Survey Unit, distance to maintained road, and type of road, Illinois, 1985

(In thousand acres)

Type of road and distance to road (miles)	All Units	Forest Survey Unit		
		Southern	Claypan	Prairie
Paved - 4 lane				
0-.125	30.6	4.0	5.7	20.9
.125-.25	15.7	4.4	3.5	7.8
.25-1.0	46.7	12.3	14.6	19.8
1.0-2.5	--	--	--	--
2.5-5.0	--	--	--	--
5.0+	--	--	--	--
Total	93.0	20.7	23.8	48.5
Paved - 2 lane				
0-.125	282.6	108.3	59.8	114.5
.125-.25	288.4	87.7	74.2	126.5
.25-1.0	394.8	150.1	123.7	121.0
1.0-2.5	5.8	1.8	--	4.0
2.5-5.0	--	--	--	--
5.0+	--	--	--	--
Total	971.6	347.9	257.7	366.0
Improved - gravel				
0-.125	935.2	212.7	344.0	378.5
.125-.25	848.5	190.4	290.6	367.5
.25-1.0	1,166.4	276.4	357.9	532.1
1.0-2.5	11.2	3.6	3.6	4.0
2.5-5.0	4.0	--	--	4.0
5.0+	--	--	--	--
Total	2,965.3	683.1	996.1	1,286.1
All types of road				
0-.125	1,248.4	325.0	409.5	513.9
.125-.25	1,152.6	282.5	368.3	501.8
.25-1.0	1,607.9	438.8	496.2	672.9
1.0-2.5	17.0	5.4	3.6	8.0
2.5-5.0	4.0	--	--	4.0
5.0+	--	--	--	--
Total	4,029.9	1,051.7	1,277.6	1,700.6

Table 32.--Area of timberland by ownership class and posting, Illinois, 1985

(In thousand acres)

Ownership class	Total	Posting									
		Not posted	Locked gate	Keep out	No trespassing	No hunting	No fishing	No dumping	Other posted signs	Owner contact	Other evidence
National Forest	225.8	214.4	7.1	--	--	1.2	--	--	3.1	--	--
Miscellaneous federal	66.3	48.4	4.4	--	3.5	--	--	--	10.0	--	--
State	54.7	47.4	--	--	--	7.3	--	--	--	--	--
County and municipal	41.8	30.3	3.6	3.9	--	4.0	--	--	--	--	--
Forest industry	13.0	13.0	--	--	--	--	--	--	--	--	--
Farmer	1,828.0	1,409.0	59.1	57.2	245.0	42.2	3.5	--	--	12.0	--
Misc. private-corp.	263.1	183.9	19.7	2.8	42.6	6.4	--	--	7.7	--	--
Misc. private-indiv.	1,537.2	1,105.5	47.2	38.5	242.1	41.7	--	15.4	15.4	23.5	7.9
All owners	4,029.9	3,051.9	141.1	102.4	533.2	102.8	3.5	15.4	36.2	35.5	7.9

Table 33.--Area of woodland and reserved timberland by ownership class, Illinois, 1985

(In thousand acres)

Ownership class	Total	Woodland	Reserved timberland
National Forest	21.2	--	21.2
Miscellaneous federal	1.2	--	1.2
State	123.4	--	123.4
County and municipal	83.4	--	83.4
Forest industry	--	--	--
Farmer	--	--	--
Misc. private-corp.	6.4	--	6.4
Misc. private-indiv.	--	--	--
All owners	235.6	--	235.6

Table 34.--Area of woodland and reserved timberland by forest type, Illinois, 1985

(In thousand acres)

Forest type	Total	Woodland	Reserved timberland
White pine	--	--	--
Loblolly-shortleaf pine	--	--	--
Oak-pine	--	--	--
Oak-hickory	176.2	--	176.2
Oak-gum-cypress	6.3	--	6.3
Elm-ash-soft maple	44.8	--	44.8
Cottonwood	--	--	--
Maple-beech	8.3	--	8.3
Nonstocked	--	--	--
All types	235.6	--	235.6

Table 35.--Area of nonforest land with trees by land use and forest type, Illinois, 1985

(In thousand acres)

Land use	All types	Forest type								
		White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
Cropland	53.5	--	--	--	9.6	--	33.9	10.0	--	--
Improved pasture	103.6	--	--	--	89.9	--	4.7	9.0	--	--
Wooded strip	178.5	--	--	--	104.6	--	64.0	--	9.9	--
Idle farmland	8.1	--	--	--	--	--	5.7	--	2.4	--
Marsh	19.3	--	--	--	--	--	19.3	--	--	--
Windbreak	133.1	--	--	--	42.0	--	70.7	--	20.4	--
Wooded pasture	162.4	--	--	--	77.6	--	13.5	1.7	58.4	11.2
Urban forestland	102.8	--	--	--	62.6	--	40.2	--	--	--
Urban and other	139.5	--	--	--	88.5	--	51.0	--	--	--
All uses	900.8	--	--	--	474.8	--	303.0	20.7	91.1	11.2

Table 36.--Number of all live trees on timberland by species group and diameter class, Illinois, 1985

(In thousand trees)

Species group	All classes	Diameter class (inches at breast height) 1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-28.9	29.0-38.9	39.0+
Softwoods															
Jack pine	719	360	60	220	79	--	--	--	--	--	--	--	--	--	--
Red pine	4,018	114	600	1,969	890	422	23	--	--	--	--	--	--	--	--
White pine	5,296	1,389	1,539	1,147	588	226	110	227	42	15	13	--	--	--	--
Loblolly pine	125	39	--	39	21	14	8	--	--	4	--	--	--	--	--
Shortleaf pine	14,721	1,104	3,006	6,000	2,470	1,318	503	207	40	26	8	22	17	--	--
Baldcypress	91	--	--	--	--	--	--	16	22	18	7	6	11	7	4
Eastern redcedar	22,380	15,279	4,131	2,109	492	222	78	30	28	--	6	5	--	--	--
Other softwoods	1,214	480	204	144	286	92	8	--	--	--	--	--	--	--	--
Total	48,564	18,765	9,540	11,628	4,826	2,294	730	480	132	63	34	33	28	7	4
Hardwoods															
Select white oak	82,873	25,053	14,049	8,795	7,661	6,158	5,337	4,449	3,630	2,532	1,709	1,138	1,674	596	92
Other white oak	16,787	3,258	2,916	2,459	2,083	2,193	1,548	1,029	526	312	206	105	126	21	5
Select red oak	24,662	8,418	2,625	2,508	1,737	2,100	1,905	1,412	1,125	801	653	410	685	259	24
Other red oak	111,613	43,485	20,667	10,746	10,392	6,906	5,888	4,361	3,471	2,154	1,365	870	1,019	261	28
Select hickory	88,063	40,815	17,430	9,974	8,247	4,581	3,117	1,754	1,025	531	304	136	138	11	--
Other hickory	97,411	51,237	18,177	11,952	7,257	4,056	2,116	1,186	849	283	168	71	55	4	--
Basswood	18,819	10,449	3,849	1,565	897	644	437	352	273	187	31	39	78	17	1
Beech	4,295	2,961	609	237	80	43	89	30	23	84	32	34	64	9	--
Hard maple	116,989	83,346	16,458	7,605	3,441	2,113	1,345	844	684	458	283	174	176	55	7
Soft maple	90,777	47,427	16,839	9,422	5,203	4,341	2,265	1,641	1,103	839	517	405	572	187	16
Elm	343,522	218,283	72,801	27,697	14,128	5,700	2,331	1,500	516	304	142	47	66	7	--
Black ash	2,075	867	609	206	112	77	52	41	28	30	39	5	9	--	--
White & green ash	111,888	59,781	21,096	12,837	6,989	4,847	2,650	1,591	845	574	303	185	145	44	1
Sycamore	8,714	2,802	702	1,210	962	573	400	547	478	340	219	175	208	70	28
Cottonwood	12,688	5,148	1,797	1,429	1,091	609	507	382	418	312	229	232	364	137	33
Willow	14,316	6,309	2,694	1,700	1,027	1,029	657	417	183	120	77	40	38	21	4
Hackberry	65,287	41,082	11,523	5,504	3,019	1,888	1,025	424	255	183	193	66	95	25	5
Bigtooth aspen	12	--	--	--	--	--	--	--	12	--	--	--	--	--	--
Quaking aspen	1,259	618	357	161	40	83	--	--	--	--	--	--	--	--	--
River birch	10,822	4,416	1,878	2,092	1,078	483	460	207	59	60	18	16	51	4	--
Sweetgum	13,307	7,074	2,028	1,157	1,144	698	500	293	212	115	25	27	34	--	--
Tupelo	12,507	7,212	2,061	1,793	423	357	218	228	80	59	15	12	34	13	2
Black cherry	66,492	39,093	12,918	6,936	3,358	2,071	1,026	365	432	184	36	22	33	18	--
Black walnut	28,611	9,783	5,004	4,975	3,307	1,964	1,525	1,114	473	221	113	57	75	--	--
Butternut	1,086	201	228	165	83	311	36	22	23	17	--	--	--	--	--
Yellow-poplar	7,927	3,339	1,500	685	635	530	317	234	378	105	105	46	41	9	3
Other hardwoods	316,166	207,594	60,610	24,861	10,542	5,799	3,351	1,425	871	491	322	197	162	39	2
Noncommercial sp.	216,661	159,279	38,931	11,608	3,808	1,852	520	307	116	69	79	48	38	6	--
Total	1,885,629	1,089,330	350,256	170,279	98,744	62,006	39,622	26,155	18,088	11,365	7,183	4,557	5,980	1,813	251
All species	1,934,193	1,108,095	359,796	181,907	103,570	64,300	40,352	26,635	18,220	11,428	7,217	4,590	6,008	1,820	255

Table 37.--Number of growing-stock trees on timberland by species group and diameter class, Illinois, 1985

(In thousand trees)

Species group	All classes	Diameter class (inches at breast height) 1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-28.9	29.0-38.9	39.0+
Softwoods															
Jack pine	695	360	60	220	55	--	--	--	--	--	--	--	--	--	--
Red pine	3,870	114	600	1,859	874	400	23	--	--	--	--	--	--	--	--
White pine	5,141	1,389	1,539	1,054	552	200	110	227	42	15	13	--	--	--	--
Loblolly pine	125	39	--	39	21	14	8	--	--	4	--	--	--	--	--
Shortleaf pine	14,616	1,104	3,006	5,920	2,470	1,318	478	207	40	26	8	22	17	--	--
Baldcypress	91	--	--	--	--	--	--	16	22	18	7	6	11	7	4
Eastern redcedar	21,383	15,192	3,759	1,791	393	132	52	30	28	--	6	--	--	--	--
Other softwoods	1,168	480	204	144	286	46	8	--	--	--	--	--	--	--	--
Total	47,089	18,678	9,168	11,027	4,651	2,110	679	480	132	63	34	28	28	7	4
Hardwoods															
Select white oak	79,369	24,705	13,830	8,223	7,190	5,798	5,040	4,155	3,445	2,412	1,618	1,057	1,390	447	59
Other white oak	16,060	3,207	2,916	2,126	2,059	2,112	1,504	996	492	280	173	79	100	15	1
Select red oak	24,018	8,418	2,625	2,361	1,712	2,094	1,847	1,315	1,120	735	608	381	572	211	19
Other red oak	106,835	43,485	19,863	9,973	9,226	6,485	5,453	3,998	3,286	1,994	1,220	770	867	190	25
Select hickory	85,694	40,353	17,205	9,545	7,908	4,186	2,896	1,648	928	506	258	118	135	8	--
Other hickory	94,630	50,721	17,355	11,412	6,800	3,842	2,021	1,081	824	283	168	71	48	4	--
Basswood	18,259	10,449	3,729	1,491	748	588	393	292	239	179	31	39	66	15	--
Beech	3,907	2,886	609	86	80	43	22	24	23	41	23	29	36	5	--
Hard maple	113,670	82,914	15,573	7,004	3,073	1,969	1,072	643	584	354	222	110	118	32	2
Soft maple	85,838	47,136	15,945	8,124	4,318	3,803	1,990	1,426	997	780	432	325	451	104	7
Elm	329,371	216,240	69,570	22,954	12,059	4,690	1,748	1,231	414	259	114	36	53	3	--
Black ash	2,061	867	609	206	112	77	52	27	28	30	39	5	9	--	--
White & green ash	107,084	59,175	20,412	11,463	6,256	4,327	2,281	1,374	747	517	275	122	110	24	1
Sycamore	8,249	2,802	570	1,210	766	573	392	519	457	324	193	169	199	55	20
Cottonwood	12,426	5,148	1,689	1,429	1,045	609	480	382	418	303	210	232	351	108	22
Willow	12,267	6,072	2,286	1,211	904	753	467	263	137	81	36	22	19	16	--
Hackberry	61,717	40,437	10,437	4,509	2,692	1,635	959	395	192	156	148	57	75	23	2
Bigtooth aspen	12	--	--	--	--	--	--	--	12	--	--	--	--	--	--
Quaking aspen	1,259	618	357	161	40	83	--	--	--	--	--	--	--	--	--
River birch	9,917	4,416	1,542	1,718	970	459	441	193	59	44	18	10	43	4	--
Sweetgum	13,016	7,074	1,908	1,102	1,095	698	466	293	191	110	25	27	27	--	--
Tupelo	12,085	6,987	2,061	1,670	405	357	195	208	80	48	15	12	34	13	--
Black cherry	59,901	38,403	11,055	4,806	2,523	1,550	736	219	382	149	28	16	25	9	--
Black walnut	26,408	9,783	4,770	4,283	3,059	1,562	1,342	864	377	194	77	52	45	--	--
Butternut	1,039	201	228	165	83	291	18	22	23	8	--	--	--	--	--
Yellow-poplar	7,259	3,339	1,239	506	489	469	317	220	378	101	105	46	41	6	3
Other hardwoods	287,276	202,614	52,809	16,632	7,587	3,555	1,899	968	526	335	163	109	64	15	--
Noncommercial sp.	54	54	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,579,681	918,504	291,192	134,370	83,199	52,608	34,031	22,756	16,359	10,223	6,199	3,894	4,878	1,307	161
All species	1,626,770	937,182	300,360	145,397	87,850	54,718	34,710	23,236	16,491	10,286	6,233	3,922	4,906	1,314	165

Table 38.--Net volume of growing stock on timberland by species group, Illinois, 1962 and 1985

(In thousand cubic feet)

Species group	1962[1]	1985
Softwoods		
Jack pine	[2]	702
Red pine	[2]	11,986
White pine	[2]	16,811
Loblolly and shortleaf pine	15,223	64,736
Baldcypress	6,835	8,904
Eastern redcedar	2,414	11,359
Other softwoods	671	2,995
Total	25,143	117,493
Hardwoods		
Select white oak	615,540	883,551
Other white oak	124,163	134,069
Select red oak	200,053	313,941
Other red oak	501,763	748,485
Select hickory	223,136	295,231
Other hickory	120,746	227,242
Basswood	25,767	54,075
Beech	14,471	12,096
Hard maple	99,824	163,083
Soft maple	259,248	341,610
Elm	367,738	267,399
Ash	218,166	260,998
Sycamore	123,255	134,626
Cottonwood	114,092	157,795
Willow	[3]	50,267
Hackberry	[3]	93,543
Aspen	9,109	1,945
River birch	[3]	36,822
Sweetgum	58,580	45,077
Tupelo	13,934	28,043
Black cherry	[3]	87,655
Black walnut	77,491	119,082
Butternut	[3]	5,712
Yellow-poplar	26,397	51,773
Other hardwoods	223,099	203,486
Total	3,416,572	4,717,606
All species	3,441,715	4,835,099

[1] Figures have been adjusted from those published after the 1962 survey to conform to 1985 volumes because of changes in survey procedures.

[2] These species were included in other softwoods in 1962.

[3] These species were included in other hardwoods in 1962.

Table 39.--Net volume of all live trees on timberland by species group and diameter class, Illinois, 1985

(In thousand cubic feet)

Species group	All classes	Diameter class (inches at breast height) 5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-28.9	29.0-38.9	39.0+
Softwoods													
Jack pine	770	512	258	--	--	--	--	--	--	--	--	--	--
Red pine	12,430	4,412	4,043	3,699	276	--	--	--	--	--	--	--	--
White pine	17,223	2,755	2,793	1,761	1,792	5,430	1,283	694	715	--	--	--	--
Loblolly pine	619	120	94	108	131	--	--	166	--	--	--	--	--
Shortleaf pine	64,399	16,672	15,223	13,941	7,949	5,026	1,220	1,128	376	1,476	1,388	--	--
Baldcypress	8,904	--	--	--	--	512	1,054	1,108	630	568	1,816	1,928	1,288
Eastern redcedar	13,245	4,818	2,928	2,076	1,074	594	1,070	--	392	293	--	--	--
Other softwoods	3,279	474	1,758	884	163	--	--	--	--	--	--	--	--
Total	120,869	29,763	27,097	22,469	11,385	11,562	4,627	3,096	2,113	2,337	3,204	1,928	1,288
Hardwoods													
Select white oak	944,075	23,542	43,797	62,347	83,775	100,336	113,858	107,464	92,233	76,107	146,109	79,270	15,237
Other white oak	141,353	6,046	11,653	21,638	22,974	22,779	15,741	11,731	9,986	5,970	9,519	2,538	778
Select red oak	330,885	6,188	9,617	21,396	29,826	31,729	36,227	32,863	34,889	27,644	60,760	34,756	4,990
Other red oak	798,578	27,310	55,391	66,984	89,701	98,768	109,862	89,333	72,529	57,032	90,777	35,371	5,520
Select hickory	308,488	25,190	45,394	44,518	50,722	41,929	34,044	24,135	17,249	10,099	13,714	1,494	--
Other hickory	233,740	29,495	39,407	40,344	33,429	27,547	29,052	13,555	9,797	5,286	5,188	640	--
Basswood	57,527	3,806	4,533	5,965	6,585	7,381	8,166	8,104	1,706	2,509	6,473	2,127	172
Beech	16,561	443	437	507	1,218	651	752	2,705	1,667	2,165	4,898	1,118	--
Hard maple	188,072	20,890	19,452	22,031	20,503	18,352	21,403	18,710	14,157	10,416	14,624	6,505	1,029
Soft maple	383,636	30,251	32,163	46,539	37,676	38,644	35,734	34,896	27,253	25,323	48,521	23,167	3,469
Elm	303,179	67,377	72,921	52,720	33,451	31,956	15,572	12,351	7,199	2,879	6,091	662	--
Black ash	8,798	376	559	794	857	792	947	1,325	2,089	353	706	--	--
White & green ash	275,673	32,199	36,007	45,084	38,120	34,127	25,352	22,819	15,200	10,197	11,512	4,760	296
Sycamore	141,590	3,498	5,819	6,734	7,138	14,276	17,084	16,719	13,567	13,991	23,291	11,328	8,145
Cottonwood	167,119	3,973	6,466	6,253	8,060	9,657	14,373	14,509	12,682	18,129	38,600	23,486	10,931
Willow	65,027	4,630	6,447	9,576	10,196	9,461	5,925	4,868	3,841	2,514	3,137	3,352	1,080
Hackberry	103,866	11,386	13,928	16,095	14,572	8,971	6,987	7,126	9,050	4,014	7,346	3,522	869
Bigtooth aspen	352	--	--	--	--	--	352	--	--	--	--	--	--
Quaking aspen	1,593	460	268	865	--	--	--	--	--	--	--	--	--
River birch	39,121	5,916	6,356	4,929	7,360	4,712	1,782	2,043	907	834	3,736	546	--
Sweetgum	46,367	2,704	5,205	6,916	7,684	6,435	6,591	4,823	1,513	1,791	2,705	--	--
Tupelo	29,215	3,336	2,068	3,240	3,219	5,097	2,600	2,363	947	913	3,296	1,940	196
Black cherry	105,917	14,666	17,890	19,174	15,227	7,850	14,516	8,172	2,099	1,529	3,019	1,775	--
Black walnut	134,352	12,707	19,350	19,285	24,749	24,089	13,661	8,654	4,811	2,888	4,158	--	--
Butternut	6,350	389	522	3,016	568	559	696	600	--	--	--	--	--
Yellow-poplar	53,361	1,477	3,290	5,241	5,035	5,598	12,695	4,706	6,212	3,332	3,810	1,491	474
Other hardwoods	283,536	47,895	45,181	45,283	40,645	27,116	21,792	17,135	13,466	10,673	10,415	3,767	168
Noncommercial sp.	58,946	18,470	12,774	10,951	4,597	3,857	1,936	1,524	1,967	1,384	1,236	234	16
Total	5,227,277	404,620	516,895	588,425	597,887	582,669	567,700	473,233	377,016	297,972	523,641	243,849	53,370
All species	5,348,146	434,383	543,992	610,894	609,272	594,231	572,327	476,329	379,129	300,309	526,845	245,777	54,658

Table 40.--Net volume of timber on timberland by class of timber and species group, Illinois, 1985

(In thousand cubic feet)

Class of timber	All species	Species group: Pine	Other softwoods	Soft hardwoods	Hard hardwoods
Live trees					
Growing-stock trees					
Sawtimber					
Saw log portion	2,668,885	44,717	11,668	715,776	1,896,724
Upper stem portion	771,609	4,095	1,658	211,565	554,291
Total	3,440,494	48,812	13,326	927,341	2,451,015
Poletimber	1,394,605	48,418	6,937	512,592	826,658
All growing-stock trees	4,835,099	97,230	20,263	1,439,933	3,277,673
Cull trees					
Short-log trees	148,069	217	293	50,104	97,455
Rough trees					
Sawtimber	113,927	577	784	41,752	70,814
Poletimber	156,388	587	809	82,345	72,647
Total	270,315	1,164	1,593	124,097	143,461
Rotten trees					
Sawtimber	78,856	--	--	31,252	47,604
Poletimber	15,807	109	--	9,159	6,539
Total	94,663	109	--	40,411	54,143
All cull trees	513,047	1,490	1,886	214,612	295,059
All live trees	5,348,146	98,720	22,149	1,654,545	3,572,732
Salvable dead trees					
Sawtimber	32,253	241	--	5,304	26,708
Poletimber	28,041	211	274	8,283	19,273
Total	60,294	452	274	13,587	45,981
All classes	5,408,440	99,172	22,423	1,668,132	3,618,713

Table 41.--Net volume of growing stock in the saw-log portion sawtimber trees on timberland by species group and diameter class, Illinois, 1985

(In thousand cubic feet)

Species group	All classes	Diameter class (inches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-28.9	29.0-38.9	39.0+
Softwoods											
Jack pine	--	--	--	--	--	--	--	--	--	--	--
Red pine	3,405	3,142	263	--	--	--	--	--	--	--	--
White pine	10,815	1,425	1,707	5,171	1,215	653	644	--	--	--	--
Loblolly pine	376	95	125	--	--	156	--	--	--	--	--
Shortleaf pine	29,435	12,314	7,370	4,789	1,158	1,062	339	1,304	1,099	--	--
Baldcypress	7,587	--	--	488	1,000	1,044	568	502	1,438	1,527	1,020
Eastern redcedar	4,081	1,367	780	566	1,015	--	353	--	--	--	--
Other softwoods	686	530	156	--	--	--	--	--	--	--	--
Total	56,385	18,873	10,401	11,014	4,388	2,915	1,904	1,806	2,537	1,527	1,020
Hardwoods											
Select white oak	585,721	--	60,543	76,025	88,272	84,092	69,841	55,829	95,268	47,945	7,906
Other white oak	74,386	--	16,880	17,682	12,068	8,882	7,002	3,917	6,207	1,542	206
Select red oak	212,918	--	21,989	23,976	28,937	25,159	26,115	20,503	40,390	22,746	3,103
Other red oak	470,779	--	64,070	73,872	85,168	68,987	52,854	40,674	60,131	21,277	3,746
Select hickory	143,449	--	36,320	31,990	25,914	18,831	12,327	7,171	9,926	970	--
Other hickory	94,566	--	24,277	20,703	22,977	10,904	7,649	4,064	3,521	471	--
Basswood	31,594	--	4,703	5,362	6,204	6,314	1,333	1,930	4,308	1,440	--
Beech	8,397	--	284	403	603	1,416	1,093	1,527	2,491	580	--
Hard maple	81,243	--	13,199	12,304	15,519	12,873	9,596	6,097	8,156	3,246	253
Soft maple	187,489	--	25,787	27,698	26,784	27,022	18,654	16,926	30,734	12,105	1,779
Elm	73,914	--	20,685	22,308	10,836	8,995	4,888	1,898	4,001	303	--
Black ash	5,352	--	643	462	759	1,067	1,630	271	520	--	--
White & green ash	114,102	--	25,919	24,827	18,859	17,225	11,338	5,996	7,303	2,417	218
Sycamore	91,956	--	5,300	10,955	13,454	13,157	9,887	10,507	16,709	6,956	5,031
Cottonwood	107,613	--	5,845	7,632	11,507	11,485	9,351	13,943	27,717	14,171	5,962
Willow	25,325	--	6,104	5,668	3,895	3,024	1,865	1,199	1,498	2,072	--
Hackberry	43,445	--	10,442	6,771	4,618	5,202	6,232	2,864	4,555	2,449	312
Bigtooth aspen	282	--	--	--	282	--	--	--	--	--	--
Quaking aspen	--	--	--	--	--	--	--	--	--	--	--
River birch	15,981	--	5,441	3,648	1,427	1,363	708	522	2,470	402	--
Sweetgum	23,706	--	5,579	5,085	4,971	3,784	1,182	1,376	1,729	--	--
Tupelo	15,158	--	2,240	3,819	2,080	1,725	739	702	2,426	1,427	--
Black cherry	35,623	--	9,033	4,477	10,902	5,874	1,424	1,013	1,943	957	--
Black walnut	56,297	--	17,048	16,361	9,355	6,374	2,895	2,134	2,130	--	--
Butternut	1,523	--	246	442	558	277	--	--	--	--	--
Yellow-poplar	33,308	--	3,775	4,219	10,154	3,693	4,853	2,563	2,802	898	351
Other hardwoods	78,373	--	20,634	16,489	12,526	10,872	6,717	5,546	4,154	1,435	--
Total	2,612,500	--	406,986	423,178	428,629	358,597	270,173	209,172	341,089	145,809	28,867
All species	2,668,885	18,873	417,387	434,192	433,017	361,512	272,077	210,978	343,626	147,336	29,887

Table 42.--Net volume on timberland by major tree class and individual species, Illinois, 1985

Species	All live trees					Saw-log size trees		
	Total all live	Growing stock	Short-log cull	Rough cull	Rotten cull	Total saw log	Sawtimber	Short-log
	Thousand cubic feet					Thousand board feet[1]		
Jack pine	770	702	--	68	--	--	--	--
Red pine	12,430	11,986	--	444	--	19,850	19,850	--
White pine	17,223	16,811	--	303	109	64,178	64,178	--
Loblolly pine	619	619	--	--	--	2,238	2,238	--
Shortleaf pine	64,399	64,117	--	282	--	174,129	174,129	--
Baldcypress	8,904	8,904	--	--	--	49,221	49,221	--
Eastern redcedar	13,245	11,359	293	1,593	--	24,961	24,158	803
Scotch pine	3,279	2,995	217	67	--	5,084	3,989	1,095
White oak	760,717	718,652	20,935	14,761	6,369	3,182,009	3,122,839	59,170
Swamp white oak	22,554	22,296	--	154	104	88,818	88,818	--
Bur oak	125,492	110,631	6,821	6,935	1,105	525,175	506,245	18,930
Swamp chestnut	6,872	6,872	--	--	--	34,536	34,536	--
Chinkapin oak	28,440	25,100	708	1,639	993	102,045	99,786	2,259
Overcup oak	6,793	5,709	498	--	586	27,805	26,485	1,320
Chestnut oak	624	624	--	--	--	2,528	2,528	--
Post oak	133,936	127,736	1,697	2,835	1,668	463,570	458,390	5,180
Cherrybark oak	10,121	10,047	--	--	74	45,517	45,517	--
Northern red oak	309,715	293,247	8,179	2,764	5,525	1,326,153	1,303,459	22,694
Shumard oak	11,049	10,647	241	--	161	53,467	52,720	747
Scarlet oak	14,294	12,762	421	816	295	63,518	62,002	1,516
Northern pin oak	15,793	14,401	300	952	140	58,998	58,203	795
Southern red oak	23,552	22,999	238	--	315	108,480	107,849	631
Shingle oak	86,788	78,712	2,252	4,707	1,117	253,339	246,076	7,263
Blackjack oak	7,524	5,760	232	1,174	358	13,308	12,589	719
Pin oak	146,322	139,368	3,039	2,551	1,364	626,416	617,519	8,897
Willow oak	717	717	--	--	--	3,635	3,635	--
Black oak	503,588	473,766	14,246	8,608	6,968	2,025,566	1,983,622	41,944
Pecan	8,894	8,311	162	421	--	32,767	32,164	603
Shellbark hickory	15,613	15,019	200	394	--	58,398	57,657	741
Shagbark hickory	173,498	166,065	3,810	2,983	640	552,493	540,064	12,429
Mockernut hickory	110,483	105,836	2,155	1,360	1,132	316,774	309,636	7,138
Bitternut hickory	72,876	70,654	524	1,337	361	192,303	190,719	1,584
Pignut hickory	160,864	156,588	547	2,668	1,061	430,039	428,199	1,840
American basswood	57,347	53,895	885	1,102	1,465	209,866	207,192	2,674
White basswood	180	180	--	--	--	--	--	--
Beech	16,561	12,096	931	690	2,844	58,551	55,428	3,123
Black maple	356	356	--	--	--	1,845	1,845	--
Sugar maple	187,716	162,727	8,798	8,211	7,980	557,828	531,444	26,384
Red maple	87,118	76,497	5,294	3,262	2,065	239,514	223,678	15,836
Silver maple	296,518	265,113	8,607	14,222	8,576	1,034,880	1,008,877	26,003
Winged elm	8,522	8,158	--	--	364	698	698	--
American elm	198,366	172,504	6,182	18,792	888	308,951	287,733	21,218
Siberian elm	312	312	--	--	--	1,531	1,531	--
Slippery elm	95,979	86,425	2,231	6,481	842	201,042	193,445	7,597
Black ash	7,998	7,790	208	--	--	34,467	33,740	727
Blue ash	800	800	--	--	--	1,453	1,453	--
White ash	151,814	137,182	5,741	6,547	2,344	440,947	422,732	18,215
Green ash	123,859	115,226	3,315	2,780	2,538	335,225	324,867	10,358
Sycamore	141,590	134,626	2,499	1,041	3,424	612,604	605,352	7,252
Eastern cottonwood	167,119	157,795	8,201	386	737	732,012	709,863	22,149
Black willow	65,027	50,267	3,963	8,437	2,360	177,697	165,985	11,712
Hackberry	103,866	93,543	2,907	5,278	2,138	294,350	285,326	9,024
Bigtooth aspen	352	352	--	--	--	1,839	1,839	--
Quaking aspen	1,593	1,593	--	--	--	--	--	--
River birch	39,121	36,822	423	1,220	656	105,923	104,729	1,194
Sweetgum	46,367	45,077	342	--	948	156,382	155,201	1,181
Water tupelo	14,336	13,908	--	232	196	45,715	45,715	--
Black tupelo	14,879	14,135	--	212	532	53,714	53,714	--
Black cherry	105,917	87,655	2,283	13,889	2,090	240,475	233,215	7,260
Black walnut	134,352	119,082	4,018	8,134	3,118	381,407	368,022	13,385
Butternut	6,350	5,712	240	398	--	10,818	9,927	891
Yellow-poplar	53,361	51,773	372	628	588	219,897	218,641	1,256
Boxelder	81,829	42,193	4,591	26,170	8,875	112,980	97,745	15,235
Ohio buckeye	2,332	1,731	--	288	313	4,248	4,248	--
Northern catalpa	1,743	863	--	292	588	3,072	3,072	--
Persimmon	13,920	12,701	330	758	131	5,230	4,046	1,184
Kentucky coffeetree	2,999	2,319	268	412	--	9,494	8,733	761
Cucumbertree	1,529	1,480	--	49	--	6,245	6,245	--
Flowering dogwood	3,103	1,484	--	1,390	229	--	--	--
Honeylocust	82,968	68,507	5,395	7,209	1,857	268,717	251,330	17,387
White mulberry	2,156	720	--	1,100	336	1,531	1,531	--
Red mulberry	14,989	8,576	1,236	5,058	119	12,253	7,971	4,282
Black locust	41,828	35,697	486	3,334	2,311	94,969	93,254	1,715
Sassafras	34,140	27,215	608	3,551	2,766	37,347	35,261	2,086
All commercial species	5,289,200	4,835,099	148,069	211,369	94,663	17,943,035	17,494,648	448,387

[1] International 1/4-inch rule.

Table 43.--Net volume of noncommercial species on timberland by individual species, Illinois, 1985

(In thousand cubic feet)

Species	Cull volume
American hornbeam	550
Hawthorn	5,174
Osage-orange	41,191
Apple	548
Eastern hophornbeam	5,835
Wild plum	38
Peachleaf willow	993
Eastern redbud	4,617
All species	58,946

Table 44.--Net volume of growing stock on timberland by species group and Forest Survey Unit, Illinois, 1985

(In thousand cubic feet)

Species group	All Units	Forest Survey Unit		
		Southern Unit	Claypan Unit	Prairie Unit
Softwoods				
Jack pine	702	--	702	--
Red pine	11,986	--	--	11,986
White pine	16,811	856	142	15,813
Loblolly pine	619	619	--	--
Shortleaf pine	64,117	63,479	638	--
Baldcypress	8,904	8,904	--	--
Eastern redcedar	11,359	5,378	750	5,231
Other softwoods	2,995	947	--	2,048
Total	117,493	80,183	2,232	35,078
Hardwoods				
Select white oak	883,551	162,650	293,299	427,602
Other white oak	134,069	56,792	72,157	5,120
Select red oak	313,941	65,288	89,739	158,914
Other red oak	748,485	227,764	270,159	250,562
Select hickory	295,231	72,632	119,265	103,334
Other hickory	227,242	95,737	85,016	46,489
Basswood	54,075	610	7,979	45,486
Beech	12,096	11,907	189	--
Hard maple	163,083	47,177	34,233	81,673
Soft maple	341,610	69,874	116,252	155,484
Elm	267,399	51,545	76,368	139,486
Black ash	8,590	193	6,428	1,969
White & green ash	252,408	72,798	104,100	75,510
Sycamore	134,626	52,870	57,312	24,444
Cottonwood	157,795	28,832	40,874	88,089
Willow	50,267	14,534	5,957	29,776
Hackberry	93,543	10,280	40,596	42,667
Bigtooth aspen	352	--	--	352
Quaking aspen	1,593	--	--	1,593
River birch	36,822	17,962	11,706	7,154
Sweetgum	45,077	38,309	6,768	--
Tupelo	28,043	27,591	452	--
Black cherry	87,655	9,038	29,419	49,198
Black walnut	119,082	10,782	44,627	63,673
Butternut	5,712	1,117	1,926	2,669
Yellow-poplar	51,773	41,306	9,414	1,053
Other hardwoods	203,486	51,052	64,370	88,064
Total	4,717,606	1,238,640	1,588,605	1,890,361
All species	4,835,099	1,318,823	1,590,837	1,925,439

Table 45.--Net volume of sawtimber on timberland by species group and Forest Survey Unit, Illinois, 1985

(In thousand board feet)[1/]

Species group	All Units	Forest Survey Unit		
		Southern Unit	Claypan Unit	Prairie Unit
Softwoods				
Jack pine	--	--	--	--
Red pine	19,850	--	--	19,850
White pine	64,178	--	777	63,401
Loblolly pine	2,238	2,238	--	--
Shortleaf pine	174,129	174,129	--	--
Baldcypress	49,221	49,221	--	--
Eastern redcedar	24,158	15,496	1,372	7,290
Other softwoods	3,989	--	--	3,989
Total	337,763	241,084	2,149	94,530
Hardwoods				
Select white oak	3,852,224	660,542	1,260,311	1,931,371
Other white oak	487,403	205,553	268,878	12,972
Select red oak	1,401,696	279,108	399,277	723,311
Other red oak	3,091,495	975,906	1,113,145	1,002,444
Select hickory	939,521	250,149	346,166	343,206
Other hickory	618,918	268,863	236,854	113,201
Basswood	207,192	911	38,288	167,993
Beech	55,428	55,428	--	--
Hard maple	533,289	133,227	101,521	298,541
Soft maple	1,232,555	228,667	421,293	582,595
Elm	483,407	85,084	168,938	229,385
Black ash	35,193	--	29,950	5,243
White & green ash	747,599	225,432	311,417	210,750
Sycamore	605,352	239,860	261,022	104,470
Cottonwood	709,863	108,616	191,979	409,268
Willow	165,985	57,295	22,028	86,662
Hackberry	285,326	29,912	110,693	144,721
Bigtooth aspen	1,839	--	--	1,839
Quaking aspen	--	--	--	--
River birch	104,729	39,462	44,762	20,505
Sweetgum	155,201	127,179	28,022	--
Tupelo	99,429	97,984	1,445	--
Black cherry	233,215	24,226	69,169	139,820
Black walnut	368,022	26,574	139,434	202,014
Butternut	9,927	2,921	1,610	5,396
Yellow-poplar	218,641	167,154	46,126	5,361
Other hardwoods	513,436	104,295	156,270	252,871
Total	17,156,885	4,394,348	5,768,598	6,993,939
All species	17,494,648	4,635,432	5,770,747	7,088,469

[1/] International 1/4-inch rule.

Table 46.--Net volume of growing stock on timberland by species group and diameter class, Illinois, 1985

(In thousand cubic feet)

Species group	All classes	Diameter class (inches at breast height) 5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-28.9	29.0-38.9	39.0+
Softwoods													
Jack pine	702	512	190	--	--	--	--	--	--	--	--	--	--
Red pine	11,986	4,173	3,982	3,555	276	--	--	--	--	--	--	--	--
White pine	16,811	2,600	2,684	1,613	1,792	5,430	1,283	694	715	--	--	--	--
Loblolly pine	619	120	94	108	131	--	--	166	--	--	--	--	--
Shortleaf pine	64,117	16,608	15,223	13,941	7,731	5,026	1,220	1,128	376	1,476	1,388	--	--
Baldcypress	8,904	--	--	--	--	512	1,054	1,108	630	568	1,816	1,928	1,288
Eastern redcedar	11,359	4,383	2,554	1,548	818	594	1,070	--	392	--	--	--	--
Other softwoods	2,995	474	1,758	600	163	--	--	--	--	--	--	--	--
Total	117,493	28,870	26,485	21,365	10,911	11,562	4,627	3,096	2,113	2,044	3,204	1,928	1,288
Hardwoods													
Select white oak	883,551	22,476	41,914	60,028	80,773	96,205	110,287	104,498	89,442	72,603	129,450	65,134	10,741
Other white oak	134,069	5,516	11,583	21,078	22,530	22,377	15,075	11,036	8,970	5,094	8,434	2,096	280
Select red oak	313,941	5,880	9,504	21,350	29,342	30,335	36,148	31,257	33,446	26,662	54,887	30,912	4,218
Other red oak	748,485	26,067	51,077	64,022	85,482	93,461	106,373	85,731	67,688	52,886	81,701	28,912	5,085
Select hickory	295,231	24,634	44,121	41,852	48,453	40,479	32,372	23,403	15,789	9,323	13,486	1,319	--
Other hickory	227,242	28,595	37,936	39,356	32,394	26,195	28,705	13,555	9,797	5,286	4,783	640	--
Basswood	54,075	3,669	4,059	5,665	6,274	6,786	7,750	7,848	1,706	2,509	5,854	1,955	--
Beech	12,096	189	437	507	378	511	752	1,761	1,401	1,985	3,387	788	--
Hard maple	163,083	19,754	17,972	20,730	17,604	15,570	19,395	15,998	12,291	7,928	11,088	4,410	343
Soft maple	341,610	27,554	28,432	42,552	34,400	35,048	33,471	33,584	23,886	22,023	41,788	16,454	2,418
Elm	267,399	59,919	66,094	46,277	27,595	28,226	13,535	11,179	6,259	2,466	5,437	412	--
Black ash	8,590	376	559	794	857	584	947	1,325	2,089	353	706	--	--
White & green ash	252,408	29,880	33,685	42,072	34,579	31,411	23,556	21,402	14,526	7,797	9,921	3,283	296
Sycamore	134,626	3,498	4,989	6,734	7,068	13,864	16,808	16,349	12,662	13,659	22,707	9,451	6,837
Cottonwood	157,795	3,973	6,349	6,253	7,796	9,657	14,373	14,271	11,974	18,129	37,661	19,253	8,106
Willow	50,267	3,819	5,984	7,725	8,141	7,172	4,867	3,761	2,388	1,559	2,035	2,816	--
Hackberry	93,543	9,803	12,875	14,490	13,931	8,568	5,767	6,464	7,982	3,724	6,187	3,328	424
Bigtooth aspen	352	--	--	--	--	--	352	--	--	--	--	--	--
Quaking aspen	1,593	460	268	865	--	--	--	--	--	--	--	--	--
River birch	36,822	5,311	5,905	4,765	7,259	4,617	1,782	1,694	907	678	3,358	546	--
Sweetgum	45,077	2,625	5,092	6,916	7,444	6,435	6,211	4,700	1,513	1,791	2,350	--	--
Tupelo	28,043	3,124	2,023	3,240	2,987	4,829	2,600	2,144	947	913	3,296	1,940	--
Black cherry	87,655	11,343	14,737	15,859	12,050	5,665	13,624	7,298	1,825	1,317	2,637	1,300	--
Black walnut	119,082	11,451	18,487	16,730	22,739	20,702	11,673	7,921	3,709	2,776	2,894	--	--
Butternut	5,712	389	522	2,874	328	559	696	344	--	--	--	--	--
Yellow-poplar	51,773	1,193	2,845	5,023	5,035	5,341	12,695	4,591	6,212	3,332	3,810	1,222	474
Other hardwoods	203,486	34,770	35,445	32,331	27,532	20,852	15,641	13,507	8,604	7,211	5,644	1,949	--
Total	4,717,606	346,268	462,894	530,088	542,971	535,449	535,455	445,621	346,013	272,004	463,501	198,120	39,222
All species	4,835,099	375,138	489,379	551,453	553,882	547,011	540,082	448,717	348,126	274,048	466,705	200,048	40,510

Table 47.--Net volume of sawtimber on timberland by species group and diameter class, Illinois, 1985

(In thousand board feet)[1/]

Species group	All classes	Diameter class (inches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-28.9	29.0-38.9	39.0+
Softwoods											
Jack pine	--	--	--	--	--	--	--	--	--	--	--
Red pine	19,850	18,341	1,509	--	--	--	--	--	--	--	--
White pine	64,178	8,322	9,792	30,662	7,332	4,026	4,044	--	--	--	--
Loblolly pine	2,238	557	719	--	--	962	--	--	--	--	--
Shortleaf pine	174,129	71,914	42,277	28,406	6,986	6,552	2,130	8,403	7,461	--	--
Baldcypress	49,221	--	--	2,896	6,035	6,438	3,568	3,234	9,762	10,364	6,924
Eastern redcedar	24,158	7,985	4,473	3,357	6,123	--	2,220	--	--	--	--
Other softwoods	3,989	3,096	893	--	--	--	--	--	--	--	--
Total	337,763	110,215	59,663	65,321	26,476	17,978	11,962	11,637	17,223	10,364	6,924
Hardwoods											
Select white oak	3,852,224	--	396,328	493,583	576,100	550,852	462,989	370,914	631,407	317,651	52,400
Other white oak	487,403	--	110,532	114,805	78,747	58,161	46,423	26,015	41,135	10,219	1,366
Select red oak	1,401,696	--	143,970	155,655	188,839	164,762	173,133	136,224	267,747	150,792	20,574
Other red oak	3,091,495	--	419,474	479,532	555,679	451,871	350,399	270,214	398,521	141,002	24,803
Select hickory	939,521	--	237,743	207,696	169,102	123,375	81,733	47,647	65,792	6,433	--
Other hickory	618,918	--	158,966	134,394	149,942	71,449	50,706	27,006	23,333	3,122	--
Basswood	207,192	--	30,783	34,815	40,489	41,362	8,833	12,823	28,549	9,538	--
Beech	55,428	--	1,856	2,622	3,926	9,274	7,256	10,145	16,508	3,841	--
Hard maple	533,289	--	86,383	79,878	101,310	84,317	63,642	40,507	54,071	21,507	1,674
Soft maple	1,232,555	--	168,773	179,862	174,869	177,025	123,643	112,528	203,817	80,241	11,797
Elm	483,407	--	135,430	144,810	70,709	58,930	32,398	12,601	26,519	2,010	--
Black ash	35,193	--	4,209	2,992	4,946	6,984	10,817	1,803	3,442	--	--
White & green ash	747,599	--	169,675	161,197	123,043	112,814	75,185	39,826	48,402	16,013	1,444
Sycamore	605,352	--	34,696	71,137	87,804	86,184	65,542	69,795	110,754	46,089	33,351
Cottonwood	709,863	--	38,258	49,554	75,094	75,236	61,991	92,627	183,664	93,906	39,533
Willow	165,985	--	39,952	36,798	25,423	19,814	12,367	7,967	9,927	13,737	--
Hackberry	285,326	--	68,352	43,954	30,126	34,068	41,318	19,029	30,180	16,231	2,068
Bigtooth aspen	1,839	--	--	--	1,839	--	--	--	--	--	--
Quaking aspen	--	--	--	--	--	--	--	--	--	--	--
River birch	104,729	--	35,615	23,685	9,309	8,931	4,693	3,465	16,371	2,660	--
Sweetgum	155,201	--	36,533	33,011	32,442	24,777	7,833	9,145	11,460	--	--
Tupelo	99,429	--	14,658	24,792	13,581	11,299	4,899	4,664	16,073	9,463	--
Black cherry	233,215	--	59,131	29,062	71,168	38,473	9,446	6,729	12,865	6,341	--
Black walnut	368,022	--	111,578	106,196	60,987	41,770	19,194	14,182	14,115	--	--
Butternut	9,927	--	1,610	2,868	3,636	1,813	--	--	--	--	--
Yellow-poplar	218,641	--	24,705	27,392	66,300	24,200	32,154	17,025	18,586	5,960	2,319
Other hardwoods	513,436	--	135,095	107,014	81,707	71,207	44,535	36,847	27,523	9,508	--
Total	17,156,885	--	2,664,305	2,747,304	2,797,117	2,348,948	1,791,129	1,389,728	2,260,761	966,264	191,329
All species	17,494,648	110,215	2,723,968	2,812,625	2,823,593	2,366,926	1,803,091	1,401,365	2,277,984	976,628	198,253

[1/] International 1/4-inch rule.

Table 48.--Net volume of live trees and growing stock on timberland by ownership class and species group, Illinois, 1985

(In thousand cubic feet)

Ownership class	Live trees					Growing stock				
	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods
National Forest	316,239	46,079	1,169	47,066	221,925	303,688	45,860	865	44,054	212,909
Miscellaneous federal	133,489	7,036	--	91,197	35,256	121,916	7,036	--	81,439	33,441
State	90,420	11,075	6,616	29,014	43,715	85,444	11,075	6,616	26,319	41,434
County and municipal	75,798	--	--	40,805	34,993	67,338	--	--	34,581	32,757
Forest industry	15,167	--	--	6,268	8,899	14,058	--	--	5,319	8,739
Farmer	2,336,137	10,864	8,244	721,684	1,595,345	2,076,601	10,477	7,288	623,726	1,435,110
Misc. private-corp.	336,934	15,106	--	132,535	189,293	305,115	14,399	--	115,019	175,697
Misc. private-indiv.	2,043,962	8,560	6,120	585,976	1,443,306	1,860,939	8,383	5,494	509,476	1,337,586
All owners	5,348,146	98,720	22,149	1,654,545	3,572,732	4,835,099	97,230	20,263	1,439,933	3,277,673

Table 49.--Net volume of growing stock on timberland by species group and forest type, Illinois, 1985

(In thousand cubic feet)

Species group	All types	Forest type								
		White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
Softwoods										
Jack pine	702	702	--	--	--	--	--	--	--	--
Red pine	11,986	11,559	--	179	248	--	--	--	--	--
White pine	16,811	16,567	--	--	244	--	--	--	--	--
Loblolly pine	619	--	--	--	619	--	--	--	--	--
Shortleaf pine	64,117	638	57,580	4,930	969	--	--	--	--	--
Baldcypress	8,904	--	--	--	--	6,616	--	--	2,288	--
Eastern redcedar	11,359	--	--	1,615	5,081	--	--	--	4,663	--
Other softwoods	2,995	--	--	2,162	411	--	--	--	422	--
Total	117,493	29,466	57,580	8,886	7,572	6,616	--	--	7,373	--
Hardwoods										
Select white oak	883,551	208	--	879	735,125	18,550	23,342	--	104,477	970
Other white oak	134,069	--	1,416	205	120,384	2,596	5,900	--	3,568	--
Select red oak	313,941	--	--	104	238,803	7,200	13,331	255	54,248	--
Other red oak	748,485	188	3,270	341	531,370	88,075	43,479	259	81,503	--
Select hickory.	295,231	--	443	--	220,244	11,333	23,599	--	39,612	--
Other hickory	227,242	--	431	475	178,414	3,118	12,567	--	32,237	--
Basswood	54,075	--	--	--	18,968	--	3,979	--	31,128	--
Beech	12,096	--	--	--	5,003	238	812	--	6,043	--
Hard maple	163,083	--	513	--	68,918	278	6,440	--	86,934	--
Soft maple	341,610	--	1,843	--	16,304	5,010	278,749	11,312	27,531	861
Elm	267,399	361	2,688	611	99,199	8,139	56,225	2,183	97,701	292
Black ash	8,590	--	--	--	1,532	--	6,760	--	298	--
White & green ash	252,408	--	--	387	85,125	15,175	72,938	--	78,308	475
Sycamore	134,626	--	--	138	26,319	3,772	79,799	--	24,598	--
Cottonwood	157,795	--	--	130	20,914	2,055	72,816	40,027	21,853	--
Willow	50,267	--	--	--	3,420	4,456	40,518	645	1,228	--
Hackberry	93,543	--	--	--	17,878	1,170	55,345	--	19,150	--
Bigtooth aspen	352	--	--	--	--	--	--	--	352	--
Quaking aspen	1,593	--	--	--	--	--	--	--	1,593	--
River birch	36,822	--	--	--	1,485	1,316	28,800	--	5,221	--
Sweetgum	45,077	--	236	771	9,774	17,803	11,210	--	5,283	--
Tupelo	28,043	--	--	--	12,793	11,504	691	--	3,055	--
Black cherry	87,655	200	--	79	40,435	2,627	4,975	300	39,039	--
Black walnut	119,082	--	696	5	50,704	--	18,191	700	48,786	--
Butternut	5,712	--	--	--	636	246	1,536	--	3,294	--
Yellow-poplar	51,773	--	1,294	272	10,824	2,183	6,526	--	30,674	--
Other hardwoods	203,486	--	724	409	73,277	4,832	55,162	2,039	67,043	--
Total	4,717,606	957	13,554	4,806	2,587,848	211,676	923,690	57,720	914,757	2,598
All species	4,835,099	30,423	71,134	13,692	2,595,420	218,292	923,690	57,720	922,130	2,598

Table 50.--Net volume of sawtimber on timberland by species group and forest type, Illinois, 1985

(In thousand board feet)[1/]

Species group	All types	Forest type								
		White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
Softwoods										
Jack pine	--	--	--	--	--	--	--	--	--	--
Red pine	19,850	18,571	--	--	1,279	--	--	--	--	--
White pine	64,178	62,919	--	--	1,259	--	--	--	--	--
Loblolly pine	2,238	--	--	--	2,238	--	--	--	--	--
Shortleaf pine	174,129	--	162,506	7,608	4,015	--	--	--	--	--
Baldcypress	49,221	--	--	--	--	36,144	--	--	13,077	--
Eastern redcedar	24,158	--	--	5,422	10,206	--	--	--	8,530	--
Other softwoods	3,989	--	--	3,989	--	--	--	--	--	--
Total	337,763	81,490	162,506	17,019	18,997	36,144	--	--	21,607	--
Hardwoods										
Select white oak	3,852,224	--	--	2,762	3,207,375	78,864	95,614	--	462,877	4,732
Other white oak	487,403	--	5,560	--	435,461	8,863	19,299	--	18,220	--
Select red oak	1,401,696	--	--	184	1,061,102	29,832	62,363	1,345	246,870	--
Other red oak	3,091,495	--	14,508	1,531	2,154,023	396,237	191,799	--	333,397	--
Select hickory	939,521	--	2,172	--	682,582	48,914	81,177	--	124,676	--
Other hickory	618,918	--	2,114	--	469,989	13,846	44,422	--	88,547	--
Basswood	207,192	--	--	--	66,809	--	19,390	--	120,993	--
Beech	55,428	--	--	--	24,593	1,252	4,054	--	25,529	--
Hard maple	533,289	--	--	--	236,186	1,441	17,993	--	277,669	--
Soft maple	1,232,555	--	2,634	--	57,630	19,303	1,040,596	35,467	76,925	--
Elm	483,407	--	1,696	--	162,457	12,729	143,761	--	162,764	--
Black ash	35,193	--	--	--	5,243	--	29,950	--	--	--
White & green ash	747,599	--	--	47	253,135	44,566	209,137	--	238,396	2,318
Sycamore	605,352	--	--	712	111,788	8,781	373,920	--	110,151	--
Cottonwood	709,863	--	--	636	92,930	10,713	318,704	182,401	104,479	--
Willow	165,985	--	--	--	10,845	16,734	132,082	2,526	3,798	--
Hackberry	285,326	--	--	--	47,423	2,657	169,973	--	65,273	--
Bigtooth aspen	1,839	--	--	--	--	--	--	--	1,839	--
Quaking aspen	--	--	--	--	--	--	--	--	--	--
River birch	104,729	--	--	--	1,949	4,901	79,987	--	17,892	--
Sweetgum	155,201	--	--	2,751	44,868	50,623	43,791	--	13,168	--
Tupelo	99,429	--	--	--	38,323	45,762	2,625	--	12,719	--
Black cherry	233,215	--	--	--	121,552	2,927	17,837	--	90,899	--
Black walnut	368,022	--	--	--	171,396	--	59,739	3,641	133,246	--
Butternut	9,927	--	--	--	1,813	--	2,713	--	5,401	--
Yellow-poplar	218,641	--	--	475	44,845	8,894	31,146	--	133,281	--
Other hardwoods	513,436	--	1,131	134	167,839	8,851	149,234	4,442	181,805	--
Total	17,156,885	--	29,815	9,232	9,672,156	816,690	3,341,306	229,822	3,050,814	7,050
All species	17,494,648	81,490	192,321	26,251	9,691,153	852,834	3,341,306	229,822	3,072,421	7,050

Table 51.--Net volume of growing stock on timberland by species group and ownership class, Illinois, 1985

(In thousand cubic feet)

Species group	All owners	Ownership class							
		National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. priv.-corp.	Misc. priv.-indiv.
Softwoods									
Jack pine	702	--	--	--	--	--	--	--	702
Red pine	11,986	--	--	--	--	--	5,983	179	5,824
White pine	16,811	856	--	11,075	--	--	4,494	--	386
Loblolly pine	619	619	--	--	--	--	--	--	--
Shortleaf pine	64,117	44,385	7,036	--	--	--	--	12,058	638
Baldcypress	8,904	--	--	6,616	--	--	2,288	--	--
Eastern redcedar	11,359	865	--	--	--	--	5,000	--	5,494
Other softwoods	2,995	--	--	--	--	--	--	2,162	833
Total	117,493	46,725	7,036	17,691	--	--	17,765	14,399	13,877
Hardwoods									
Select white oak	883,551	52,347	6,237	6,080	8,153	1,708	397,414	54,178	357,434
Other white oak	134,069	13,328	1,488	1,744	--	--	57,757	4,679	55,073
Select red oak	313,941	20,265	4,347	223	3,458	1,012	136,296	14,570	133,770
Other red oak	748,485	57,411	7,476	12,058	4,790	394	313,758	28,658	323,940
Select hickory	295,231	10,614	4,470	3,696	2,477	737	135,244	22,975	115,018
Other hickory	227,242	27,044	2,861	4,850	922	1,650	87,743	14,354	87,818
Basswood	54,075	358	--	--	2,323	--	34,227	3,416	13,751
Beech	12,096	4,742	--	--	--	--	2,651	784	3,919
Hard maple	163,083	13,983	513	--	8,806	--	75,952	3,081	60,748
Soft maple	341,610	2,103	33,222	4,321	15,632	--	115,426	32,210	138,696
Elm	267,399	10,440	5,319	1,172	3,573	--	131,183	24,553	91,159
Black ash	8,590	--	--	--	--	--	7,119	437	1,034
White & green ash	252,408	6,661	4,311	7,322	1,006	398	112,677	15,670	104,363
Sycamore	134,626	4,582	1,809	3,304	--	2,830	66,721	6,793	48,587
Cottonwood	157,795	--	22,955	1,236	--	1,000	71,027	16,322	45,255
Willow	50,267	--	2,666	3,376	--	--	22,280	3,413	18,532
Hackberry	93,543	239	1,208	1,024	8,945	148	47,000	5,769	29,210
Bigtooth aspen	352	--	--	--	--	--	352	--	--
Quaking aspen	1,593	--	--	--	--	--	--	--	1,593
River birch	36,822	1,478	193	608	--	--	13,383	6,927	14,233
Sweetgum	45,077	5,134	4,583	--	544	--	17,494	781	16,541
Tupelo	28,043	4,347	--	10,444	--	--	7,596	882	4,774
Black cherry	87,655	439	458	246	2,333	--	31,707	8,324	44,148
Black walnut	119,082	2,058	--	3,859	996	2,840	57,330	4,362	47,637
Butternut	5,712	215	--	--	--	--	3,010	--	2,487
Yellow-poplar	51,773	10,474	7,728	--	--	--	19,263	769	13,539
Other hardwoods	203,486	8,701	3,036	2,190	3,380	1,341	94,226	16,809	73,803
Total	4,717,606	256,963	114,880	67,753	67,338	14,058	2,058,836	290,716	1,847,062
All species	4,835,099	303,688	121,916	85,444	67,338	14,058	2,076,601	305,115	1,860,939

Table 52.--Net volume of sawtimber on timberland by species group and ownership class, Illinois, 1985

(In thousand board feet)[1/]

Species group	All owners	Ownership class							
		National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. priv.-corp.	Misc. priv.-indiv.
Softwoods									
Jack pine	--	--	--	--	--	--	--	--	--
Red pine	19,850	--	--	--	--	--	1,235	--	18,615
White pine	64,178	--	--	57,535	--	--	4,607	--	2,036
Loblolly pine	2,238	2,238	--	--	--	--	--	--	--
Shortleaf pine	174,129	89,314	36,205	--	--	--	--	48,610	--
Baldcypress	49,221	--	--	36,144	--	--	13,077	--	--
Eastern redcedar	24,158	4,040	--	--	--	--	6,778	--	13,340
Other softwoods	3,989	--	--	--	--	--	--	3,989	--
Total	337,763	95,592	36,205	93,679	--	--	25,697	52,599	33,991
Hardwoods									
Select white oak	3,852,224	208,130	18,856	27,916	28,476	8,675	1,754,389	220,138	1,585,644
Other white oak	487,403	43,657	4,662	9,045	--	--	207,647	13,677	208,715
Select red oak	1,401,696	85,899	22,131	1,096	16,011	5,194	609,433	58,653	603,279
Other red oak	3,091,495	256,826	33,099	46,282	24,714	1,921	1,277,396	110,586	1,340,671
Select hickory	939,521	30,548	17,959	15,130	11,088	3,818	433,380	84,582	343,016
Other hickory	618,918	78,332	4,129	14,986	3,297	7,076	220,936	45,261	244,901
Basswood	207,192	911	--	--	10,783	--	134,612	11,797	49,089
Beech	55,428	22,040	--	--	--	--	9,518	4,068	19,802
Hard maple	533,289	38,984	--	--	37,853	--	258,283	10,851	187,318
Soft maple	1,232,555	2,634	128,201	19,147	57,147	--	400,461	129,879	495,086
Elm	483,407	13,774	5,636	2,488	10,317	--	249,583	29,948	171,661
Black ash	35,193	--	--	--	--	--	33,740	--	1,453
White & green ash	747,599	20,318	11,369	32,299	5,182	--	329,867	41,770	306,794
Sycamore	605,352	23,222	7,910	16,346	--	14,785	304,782	24,082	214,225
Cottonwood	709,863	--	111,789	--	--	4,931	326,676	66,740	199,727
Willow	165,985	--	13,535	14,788	--	--	72,327	10,166	55,169
Hackberry	285,326	--	--	2,439	35,672	--	132,365	23,056	91,794
Bigtooth aspen	1,839	--	--	--	--	--	1,839	--	--
Quaking aspen	--	--	--	--	--	--	--	--	--
River birch	104,729	5,049	--	1,814	--	--	45,638	16,182	36,046
Sweetgum	155,201	14,889	17,415	--	1,498	--	70,093	3,371	47,935
Tupelo	99,429	16,144	--	41,474	--	--	21,073	2,922	17,816
Black cherry	233,215	--	1,166	--	4,707	--	87,009	16,037	124,296
Black walnut	368,022	2,904	--	13,109	3,712	10,168	183,823	10,875	143,431
Butternut	9,927	1,103	--	--	--	--	5,193	--	3,631
Yellow-poplar	218,641	38,041	38,679	--	--	--	88,330	3,967	49,624
Other hardwoods	513,436	20,881	5,553	7,138	4,364	4,881	252,801	51,133	166,685
Total	17,156,885	924,286	442,089	265,497	254,821	61,449	7,511,194	989,741	6,707,808
All species	17,494,648	1,019,878	478,294	359,176	254,821	61,449	7,536,891	1,042,340	6,741,799

[1/] International 1/4-inch rule.

Table 53.--Net volume of growing stock on timberland by forest type and stand-age class, Illinois, 1985

(In thousand cubic feet)

Forest type	All ages	Stand-age class (years)												
		1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-120	121-140	141+
White pine	30,423	--	856	12,320	6,172	11,075	--	--	--	--	--	--	--	--
Loblolly-shortleaf pine	71,134	--	2,062	42,104	6,215	7,627	5,446	--	7,680	--	--	--	--	--
Oak-pine	13,692	2,136	1,085	8,954	--	--	1,517	--	--	--	--	--	--	--
Oak-hickory	2,595,420	37,389	56,743	52,569	133,100	205,465	139,828	312,433	488,792	318,710	331,595	274,995	169,935	73,866
Oak-gum-cypress	218,292	2,802	785	17,701	13,872	25,182	30,318	20,400	50,871	20,894	2,749	12,294	--	20,424
Elm-ash-soft maple	923,690	15,308	13,843	70,004	123,678	102,615	82,655	182,334	142,475	90,268	73,221	19,657	7,632	--
Cottonwood	57,720	873	2,750	2,186	--	9,739	21,212	20,070	--	890	--	--	--	--
Maple-beech	922,130	58,493	59,047	77,252	90,483	79,326	115,177	130,504	95,308	80,157	58,521	61,218	16,644	--
Nonstocked	2,598	2,598	--	--	--	--	--	--	--	--	--	--	--	--
All types	4,835,099	119,599	137,171	283,090	373,520	441,029	396,153	665,741	785,126	510,919	466,086	368,164	194,211	94,290

Table 54.--Net volume of sawtimber on timberland by forest type and stand-age class, Illinois, 1985

(In thousand board feet)[1/]

Forest type	All ages	Stand-age class (years) 1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90
White pine	81,490	--	--	6,619	17,336	57,535	--	--	--	--
Loblolly-shortleaf pine	192,321	--	--	90,422	25,598	25,654	14,442	--	36,205	--
Oak-pine	26,251	5,365	2,762	14,625	--	--	3,499	--	--	--
Oak-hickory	9,691,153	114,063	165,123	115,196	308,323	558,856	492,426	1,146,807	1,893,240	1,266,641
Oak-gum-cypress	852,834	11,335	--	40,944	47,118	90,438	116,676	84,830	201,208	94,769
Elm-ash-soft maple	3,341,306	39,840	24,448	130,205	322,588	350,180	314,953	741,404	585,161	389,779
Cottonwood	229,822	--	8,362	4,557	--	36,868	92,588	83,111	--	4,336
Maple-beech	3,072,421	160,616	137,844	181,739	220,592	251,378	422,063	496,169	363,926	314,989
Nonstocked	7,050	7,050	--	--	--	--	--	--	--	--
All types	17,494,648	338,269	338,539	584,307	941,555	1,370,909	1,456,647	2,552,321	3,079,740	2,070,514

Forest type	Stand-age class (years) 91-100	101-120	121-140	141+
White pine	--	--	--	--
Loblolly-shortleaf pine	--	--	--	--
Oak-pine	--	--	--	--
Oak-hickory	1,401,385	1,137,317	735,274	356,502
Oak-gum-cypress	12,375	59,440	--	93,701
Elm-ash-soft maple	321,434	91,451	29,863	--
Cottonwood	--	--	--	--
Maple-beech	208,718	256,257	58,130	--
Nonstocked	--	--	--	--
All types	1,943,912	1,544,465	823,267	450,203

[1/] International 1/4-inch rule.

Table 55.--Net volume of growing stock on timberland by forest type, stand-size class, and basal-area class, Illinois, 1985

(In thousand cubic feet)

Forest type and stand-size class	All classes	Basal area class (square feet per acre) 0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80
White pine									
Sawtimber	17,247	--	--	--	--	--	--	--	--
Poletimber	12,320	--	--	--	--	--	--	--	1,588
Sapling & seedling	856	--	--	--	--	--	--	--	--
All stands	30,423	--	--	--	--	--	--	--	1,588
Loblolly-shortleaf pine									
Sawtimber	30,554	--	--	--	--	--	--	--	--
Poletimber	38,518	--	--	--	--	--	--	--	5,446
Sapling & seedling	2,062	--	--	--	2,062	--	--	--	--
All stands	71,134	--	--	--	2,062	--	--	--	5,446
Oak-pine									
Sawtimber	2,774	--	--	--	--	--	--	--	--
Poletimber	7,697	--	--	--	--	--	--	--	--
Sapling & seedling	3,221	--	--	--	--	--	1,085	--	2,136
All stands	13,692	--	--	--	--	--	1,085	--	2,136
Oak-hickory									
Sawtimber	2,133,303	--	--	6,350	8,259	34,487	118,829	118,908	343,270
Poletimber	367,985	--	--	--	--	29,018	40,132	20,662	95,717
Sapling & seedling	94,132	135	3,487	9,813	3,441	32,403	31,022	8,148	2,533
All stands	2,595,420	135	3,487	16,163	11,700	95,908	189,983	147,718	441,520
Oak-gum-cypress									
Sawtimber	199,489	--	--	--	1,972	6,421	7,750	15,731	22,549
Poletimber	15,216	--	--	--	--	2,251	--	2,852	--
Sapling & seedling	3,587	--	--	785	--	--	--	--	--
All stands	218,292	--	--	785	1,972	8,672	7,750	18,583	22,549
Elm-ash-soft maple									
Sawtimber	731,590	--	--	--	4,393	6,460	39,103	34,732	74,566
Poletimber	162,967	--	--	--	4,180	--	18,629	12,154	25,325
Sapling & seedling	29,133	--	2,715	2,466	453	3,902	5,107	7,374	4,134
All stands	923,690	--	2,715	2,466	9,026	10,362	62,839	54,260	104,025
Cottonwood									
Sawtimber	51,911	--	--	--	890	--	--	--	--
Poletimber	2,186	--	--	--	--	--	2,186	--	--
Sapling & seedling	3,623	--	1,527	873	--	--	1,223	--	--
All stands	57,720	--	1,527	873	890	--	3,409	--	--
Maple-beech									
Sawtimber	618,371	--	--	5,290	7,187	28,118	48,872	33,611	113,955
Poletimber	185,278	--	--	1,184	3,553	12,392	14,462	19,000	33,134
Sapling & seedling	118,481	422	6,131	8,355	19,045	17,555	32,952	3,034	22,765
All stands	922,130	422	6,131	14,829	29,785	58,065	96,286	55,645	169,854
Nonstocked	2,598	--	--	2,306	--	--	292	--	--
All types									
Sawtimber	3,785,239	--	--	11,640	22,701	75,486	214,554	202,982	554,340
Poletimber	792,167	--	--	1,184	7,733	43,661	75,409	54,668	161,210
Sapling & seedling	255,095	557	13,860	22,292	25,001	53,860	71,389	18,556	31,568
Nonstocked	2,598	--	--	2,306	--	--	292	--	--
All stands	4,835,099	557	13,860	37,422	55,435	173,007	361,644	276,206	747,118

(Table 55 continued on next page)

(Table 55 continued)

Forest type and stand-size class	Basal area class (square feet per acre)					
	81-90	91-100	101-120	121-150	151-180	181+
White pine						
Sawtimber	--	--	6,172	11,075	--	--
Poletimber	--	--	4,548	6,184	--	--
Sapling & seedling	856	--	--	--	--	--
All stands	856	--	10,720	17,259	--	--
Loblolly-shortleaf pine						
Sawtimber	7,680	--	9,032	13,842	--	--
Poletimber	--	--	17,334	--	--	15,738
Sapling & seedling	--	--	--	--	--	--
All stands	7,680	--	26,366	13,842	--	15,738
Oak-pine						
Sawtimber	--	--	2,774	--	--	--
Poletimber	--	--	3,389	4,308	--	--
Sapling & seedling	--	--	--	--	--	--
All stands	--	--	6,163	4,308	--	--
Oak-hickory						
Sawtimber	354,962	253,512	591,428	268,315	34,983	--
Poletimber	70,413	46,465	57,931	7,647	--	--
Sapling & seedling	3,150	--	--	--	--	--
All stands	428,525	299,977	649,359	275,962	34,983	--
Oak-gum-cypress						
Sawtimber	12,846	--	78,427	33,369	--	20,424
Poletimber	3,392	--	3,827	2,894	--	--
Sapling & seedling	2,802	--	--	--	--	--
All stands	19,040	--	82,254	36,263	--	20,424
Elm-ash-soft maple						
Sawtimber	65,974	88,454	147,565	196,647	60,533	13,163
Poletimber	31,381	9,271	62,027	--	--	--
Sapling & seedling	--	2,982	--	--	--	--
All stands	97,355	100,707	209,592	196,647	60,533	13,163
Cottonwood						
Sawtimber	--	--	8,678	21,131	--	21,212
Poletimber	--	--	--	--	--	--
Sapling & seedling	--	--	--	--	--	--
All stands	--	--	8,678	21,131	--	21,212
Maple-beech						
Sawtimber	80,442	56,375	174,855	69,666	--	--
Poletimber	42,264	15,243	44,046	--	--	--
Sapling & seedling	8,222	--	--	--	--	--
All stands	130,928	71,618	218,901	69,666	--	--
Nonstocked	--	--	--	--	--	--
All types						
Sawtimber	521,904	398,341	1,018,931	614,045	95,516	54,799
Poletimber	147,450	70,979	193,102	21,033	--	15,738
Sapling & seedling	15,030	2,982	--	--	--	--
Nonstocked	--	--	--	--	--	--
All stands	684,384	472,302	1,212,033	635,078	95,516	70,537

Table 56.--Net volume of sawtimber on timberland by forest type, stand-size class, and basal-area class, Illinois, 1985

(In thousand board feet)[1/]

Forest type and stand-size class	All classes	Basal area class (square feet per acre)							
		0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80
White pine									
Sawtimber	74,871	--	--	--	--	--	--	--	--
Poletimber	6,619	--	--	--	--	--	--	--	777
Sapling & seedling	--	--	--	--	--	--	--	--	--
All stands	81,490	--	--	--	--	--	--	--	777
Loblolly-shortleaf pine									
Sawtimber	133,246	--	--	--	--	--	--	--	--
Poletimber	59,075	--	--	--	--	--	--	--	14,442
Sapling & seedling	--	--	--	--	--	--	--	--	--
All stands	192,321	--	--	--	--	--	--	--	14,442
Oak-pine									
Sawtimber	5,585	--	--	--	--	--	--	--	--
Poletimber	12,539	--	--	--	--	--	--	--	--
Sapling & seedling	8,127	--	--	--	--	--	2,762	--	5,365
All stands	26,251	--	--	--	--	--	2,762	--	5,365
Oak-hickory									
Sawtimber	8,626,814	--	--	24,290	34,119	161,163	488,663	469,661	1,394,630
Poletimber	785,153	--	--	--	--	56,605	84,149	42,733	210,646
Sapling & seedling	279,186	--	1,755	36,953	6,155	85,176	111,126	23,444	7,419
All stands	9,691,153	--	1,755	61,243	40,274	302,944	683,938	535,838	1,612,695
Oak-gum-cypress									
Sawtimber	821,159	--	--	--	8,871	27,541	28,468	69,996	92,608
Poletimber	20,340	--	--	--	--	1,549	--	4,984	--
Sapling & seedling	11,335	--	--	--	--	--	--	--	--
All stands	852,834	--	--	--	8,871	29,090	28,468	74,980	92,608
Elm-ash-soft maple									
Sawtimber	2,964,357	--	--	--	13,602	20,889	155,762	141,735	292,013
Poletimber	316,082	--	--	--	8,563	--	38,075	14,230	52,126
Sapling & seedling	60,867	--	9,392	6,162	--	11,678	15,724	6,999	10,912
All stands	3,341,306	--	9,392	6,162	22,165	32,567	209,561	162,964	355,051
Cottonwood									
Sawtimber	216,903	--	--	--	4,336	--	--	--	--
Poletimber	4,557	--	--	--	--	--	4,557	--	--
Sapling & seedling	8,362	--	5,084	--	--	--	3,278	--	--
All stands	229,822	--	5,084	--	4,336	--	7,835	--	--
Maple-beech									
Sawtimber	2,350,569	--	--	22,777	25,232	122,913	190,034	137,107	425,824
Poletimber	419,139	--	--	2,361	9,960	28,417	32,194	41,262	75,760
Sapling & seedling	302,713	--	16,039	21,597	55,866	50,721	92,829	12,594	53,067
All stands	3,072,421	--	16,039	46,735	91,058	202,051	315,057	190,963	554,651
Nonstocked	7,050	--	--	7,050	--	--	--	--	--
All types									
Sawtimber	15,193,504	--	--	47,067	86,160	332,506	862,927	818,499	2,205,075
Poletimber	1,623,504	--	--	2,361	18,523	86,571	158,975	103,209	353,751
Sapling & seedling	670,590	--	32,270	64,712	62,021	147,575	225,719	43,037	76,763
Nonstocked	7,050	--	--	7,050	--	--	--	--	--
All stands	17,494,648	--	32,270	121,190	166,704	566,652	1,247,621	964,745	2,635,589

(Table 56 continued on next page)

[1/] International 1/4-inch rule.

(Table 56 continued)

Forest type and stand-size class	Basal area class (square feet per acre)					
	81-90	91-100	101-120	121-150	151-180	181+
White pine						
Sawtimber	--	--	17,336	57,535	--	--
Poletimber	--	--	2,078	3,764	--	--
Sapling & seedling	--	--	--	--	--	--
All stands	--	--	19,414	61,299	--	--
Loblolly-shortleaf pine						
Sawtimber	36,205	--	45,789	51,252	--	--
Poletimber	--	--	38,783	--	--	5,850
Sapling & seedling	--	--	--	--	--	--
All stands	36,205	--	84,572	51,252	--	5,850
Oak-pine						
Sawtimber	--	--	5,585	--	--	--
Poletimber	--	--	6,775	5,764	--	--
Sapling & seedling	--	--	--	--	--	--
All stands	--	--	12,360	5,764	--	--
Oak-hickory						
Sawtimber	1,424,777	1,000,354	2,381,138	1,104,747	143,272	--
Poletimber	155,283	104,519	115,633	15,585	--	--
Sapling & seedling	7,158	--	--	--	--	--
All stands	1,587,218	1,104,873	2,496,771	1,120,332	143,272	--
Oak-gum-cypress						
Sawtimber	52,259	--	319,615	128,100	--	93,701
Poletimber	4,854	--	6,879	2,074	--	--
Sapling & seedling	11,335	--	--	--	--	--
All stands	68,448	--	326,494	130,174	--	93,701
Elm-ash-soft maple						
Sawtimber	248,332	359,598	596,271	798,681	272,938	64,536
Poletimber	61,845	24,110	117,133	--	--	--
Sapling & seedling	--	--	--	--	--	--
All stands	310,177	383,708	713,404	798,681	272,938	64,536
Cottonwood						
Sawtimber	--	--	34,444	85,535	--	92,588
Poletimber	--	--	--	--	--	--
Sapling & seedling	--	--	--	--	--	--
All stands	--	--	34,444	85,535	--	92,588
Maple-beech						
Sawtimber	311,165	192,695	643,152	279,670	--	--
Poletimber	91,553	38,646	98,986	--	--	--
Sapling & seedling	--	--	--	--	--	--
All stands	402,718	231,341	742,138	279,670	--	--
Nonstocked	--	--	--	--	--	--
All types						
Sawtimber	2,072,738	1,552,647	4,043,330	2,505,520	416,210	250,825
Poletimber	313,535	167,275	386,267	27,187	--	5,850
Sapling & seedling	18,493	--	--	--	--	--
Nonstocked	--	--	--	--	--	--
All stands	2,404,766	1,719,922	4,429,597	2,532,707	416,210	256,675

Table 57.--Net volume of growing stock and sawtimber on timberland by county and species group, Illinois, 1985

County	GROWING STOCK					SAWTIMBER				
	Species group					Species group				
	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods
	SOUTHERN UNIT									
	Thousand cubic feet					Thousand board feet[1]				
Alexander	72,352	1,574	719	15,994	54,065	265,840	5,535	3,111	52,906	204,288
Franklin	59,952	1,117	761	19,832	38,242	218,817	5,653	3,585	68,510	141,069
Gallatin	58,257	3,362	574	16,528	37,793	204,731	7,867	2,736	55,662	138,466
Hamilton	49,432	859	746	16,219	31,608	178,721	4,337	3,490	55,235	115,659
Hardin	79,070	7,230	755	20,053	51,032	267,340	14,672	3,546	63,887	185,235
Jackson	172,625	4,463	1,579	51,088	115,495	618,330	15,918	7,501	168,071	426,840
Johnson	101,258	4,219	1,087	29,946	66,006	359,346	10,524	4,924	101,889	242,009
Massac	43,113	1,882	441	13,103	27,687	153,793	5,487	2,145	44,187	101,974
Perry	57,654	1,156	877	18,566	37,055	202,453	4,445	3,795	60,318	133,895
Pope	189,681	28,538	1,261	40,598	119,284	635,054	65,043	5,799	124,423	439,789
Pulaski	35,044	552	539	11,402	22,551	123,751	2,617	2,260	37,133	81,741
Randolph	93,921	1,620	1,308	30,225	60,768	328,770	6,743	5,575	97,552	218,900
Saline	59,549	3,066	744	16,421	39,318	202,514	6,387	3,465	51,972	140,690
Union	109,645	2,992	1,183	28,970	76,500	393,864	9,905	5,130	95,548	283,281
White	47,651	917	539	16,309	29,886	172,420	4,308	2,374	56,233	109,505
Williamson	89,619	2,354	1,169	28,649	57,447	309,688	6,926	5,281	92,513	204,968
Total	1,318,823	65,901	14,282	373,903	864,737	4,635,432	176,367	64,717	1,226,039	3,168,309
	CLAYPAN UNIT									
Bond	35,570	--	8	9,571	25,991	126,027	--	15	30,980	95,032
Calhoun	81,234	--	41	21,704	59,489	295,211	--	73	73,569	221,569
Clark	81,380	--	54	21,888	59,438	303,437	--	99	76,126	227,212
Clay	58,696	451	30	15,409	42,806	210,693	236	54	51,754	158,649
Clinton	55,654	146	35	15,545	39,928	206,834	76	65	53,977	152,716
Crawford	64,153	--	39	17,517	46,597	237,893	--	70	60,567	177,256
Cumberland	40,472	145	4	10,028	30,295	139,133	77	7	31,547	107,502
Edwards	20,520	--	6	5,604	14,910	73,470	--	12	18,390	55,068
Effingham	60,761	146	18	17,504	43,093	216,809	76	34	58,161	158,538
Fayette	94,198	147	7	23,128	70,916	318,492	77	13	71,763	246,639
Greene	63,391	--	33	17,274	46,084	230,758	--	59	58,515	172,184
Jasper	39,943	--	6	10,432	29,505	140,029	--	10	33,164	106,855
Jefferson	88,634	--	51	23,832	64,751	325,938	--	95	81,879	243,964
Jersey	74,584	--	42	20,153	54,389	275,142	--	76	69,287	205,779
Lawrence	37,092	149	12	10,018	26,913	131,577	78	22	32,416	99,061
Macoupin	100,977	--	48	27,195	73,734	364,324	--	88	91,166	273,070
Madison	69,323	--	41	18,724	50,558	255,551	--	73	64,357	191,121
Marion	85,158	--	49	23,095	62,014	314,815	--	91	79,544	235,180
Monroe	63,586	--	36	17,266	46,284	234,609	--	67	58,997	175,545
Montgomery	50,508	--	28	14,017	36,463	185,496	--	49	47,977	137,470
Richland	37,004	149	15	9,537	27,303	131,525	79	28	31,469	99,949
St. Clair	62,328	--	28	17,107	45,193	226,109	--	52	57,125	168,932
Shelby	72,245	--	47	19,603	52,595	269,322	--	86	68,071	201,165
Wabash	14,990	--	5	4,058	10,927	53,893	--	9	13,405	40,479
Washington	65,259	--	34	17,435	47,790	239,016	--	65	59,504	179,447
Wayne	73,177	149	33	21,148	51,847	264,644	78	60	71,572	192,934
Total	1,590,837	1,482	750	428,792	1,159,813	5,770,747	777	1,372	1,445,282	4,323,316

[1] International 1/4-inch rule.

(Table 57 continued on next page)

(Table 57 continued)

County	GROWING STOCK					SAWTIMBER				
	Species group					Species group				
	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	All species	Pine	Other softwoods	Soft hardwoods	Hard hardwoods
	PRAIRIE UNIT									
	Thousand cubic feet					Thousand board feet[1]				
Adams	108,337	822	203	34,086	73,226	414,549	1,894	95	114,388	298,172
Boone	9,936	58	35	3,256	6,587	38,043	144	51	10,970	26,878
Brown	56,763	827	139	16,942	38,855	193,780	648	220	48,950	143,962
Bureau	34,673	502	82	10,801	23,288	110,503	310	143	27,854	82,196
Carroll	37,516	241	75	11,883	25,317	145,463	633	54	40,468	104,308
Cass	47,799	2,223	92	15,194	30,290	183,418	9,337	63	50,504	123,514
Champaign	6,945	56	36	2,252	4,601	23,493	58	63	6,073	17,299
Christian	19,879	249	96	6,123	13,411	67,990	201	164	17,499	50,126
Coles	27,852	403	60	8,343	19,046	95,159	301	101	24,221	70,536
Cook	3,299	145	4	634	2,516	13,696	258	7	1,876	11,555
De Kalb	5,436	30	12	1,727	3,667	21,156	75	16	5,904	15,161
De Witt	11,813	130	43	3,888	7,752	37,188	99	72	9,618	27,399
Douglas	7,107	106	18	2,137	4,846	24,036	70	33	6,141	17,792
Du Page	8,324	1,279	24	2,765	4,256	33,011	6,596	40	8,857	17,518
Edgar	25,612	374	40	7,565	17,633	87,894	266	76	22,085	65,467
Ford	2,544	8	9	793	1,734	9,895	16	21	2,625	7,233
Fulton	126,185	860	312	40,169	84,844	482,232	2,007	329	134,162	345,734
Grundy	19,314	458	42	6,133	12,681	72,399	1,860	50	19,860	50,629
Hancock	68,452	974	176	20,433	46,869	233,883	742	296	58,822	174,023
Henderson	43,243	2,476	80	13,819	26,868	165,279	11,829	73	45,372	108,005
Henry	21,773	282	57	6,490	14,944	75,354	214	101	18,734	56,305
Iroquois	18,247	101	98	6,095	11,953	67,051	114	214	19,360	47,363
Jo Daviess	86,679	571	189	27,485	58,434	333,920	1,434	159	92,701	239,626
Kane	15,542	447	67	4,825	10,203	51,174	615	117	12,928	37,514
Kankakee	13,678	755	57	4,592	8,274	44,962	3,321	99	11,974	29,568
Kendall	6,623	48	16	2,174	4,385	24,567	65	33	7,093	17,376
Knox	58,880	481	119	18,410	39,870	221,048	855	141	60,157	159,895
Lake	644	4	--	103	537	2,687	2	--	277	2,408
La Salle	40,075	623	84	12,592	26,776	151,936	2,225	84	41,568	108,059
Lee	16,149	401	44	5,146	10,558	62,738	1,843	42	17,293	43,560
Livingston	9,081	101	37	2,964	5,979	29,384	67	67	7,737	21,513
Logan	8,320	67	61	2,734	5,458	29,162	71	111	8,002	20,978
Macon	7,619	235	22	2,348	5,014	25,643	312	41	6,781	18,509
Marshall	30,792	189	58	9,821	20,724	119,828	542	29	33,645	85,612
Mason	52,573	3,574	76	16,489	32,434	197,917	14,844	32	53,566	129,475
McDonough	36,547	536	78	10,837	25,096	124,389	376	141	31,115	92,757
McHenry	22,624	120	66	7,250	15,188	87,366	314	98	24,365	62,589
McLean	12,554	113	65	4,184	8,192	39,750	82	115	10,182	29,371
Menard	21,324	163	91	6,923	14,147	77,962	210	177	21,923	55,652
Mercer	40,528	600	82	12,809	27,037	153,989	2,205	84	42,279	109,421
Morgan	37,269	356	247	11,916	24,750	128,847	294	460	34,130	93,963
Moultrie	9,925	77	107	3,341	6,400	33,679	66	194	9,217	24,202
Ogle	36,983	218	78	11,761	24,926	144,210	624	62	40,266	103,258
Peoria	72,058	537	155	22,776	48,590	274,186	1,179	133	75,793	197,081
Piatt	3,958	46	8	1,194	2,710	14,150	45	14	3,655	10,436
Pike	125,126	1,699	581	40,410	82,436	450,663	4,478	1,072	125,114	319,999
Putnam	20,175	140	39	6,384	13,612	77,554	342	25	21,508	55,679
Rock Island	53,244	682	107	16,870	35,585	204,254	2,456	77	56,653	145,068
Sangamon	34,013	295	59	10,452	23,207	128,103	515	53	34,245	93,290
Schuyler	88,591	566	327	29,268	58,430	331,085	925	654	96,331	233,175
Scott	25,209	339	61	7,629	17,180	87,207	286	100	22,482	64,339
Stark	5,719	39	11	1,781	3,888	21,911	80	14	5,924	15,893
Stephenson	20,539	132	39	6,415	13,953	79,630	329	32	21,693	57,576
Tazewell	32,755	559	57	10,265	21,874	124,713	2,155	30	33,863	88,665
Vermilion	35,466	474	97	11,286	23,609	124,796	669	146	33,780	90,201
Warren	25,688	226	49	7,995	17,418	95,560	350	65	25,893	69,252
Whiteside	21,458	452	45	6,801	14,160	81,923	1,893	46	22,513	57,471
Will	24,938	977	74	8,238	15,649	76,600	2,483	130	19,801	54,186
Winnebago	24,253	164	62	7,674	16,353	92,848	363	77	25,670	66,738
Woodford	36,791	237	83	11,723	24,748	142,656	653	54	39,964	101,985
Total	1,925,439	29,847	5,231	607,393	1,282,968	7,088,469	87,240	7,290	1,926,424	5,067,515
All counties	4,835,099	97,230	20,263	1,410,088	3,307,518	17,494,648	264,384	73,379	4,597,745	12,559,140

[1] International 1/4-inch rule.

Table 58.--Net volume of sawtimber on timberland by species group and tree grade, Illinois, 1985

(In thousand board feet)[1/]

Species group	All species	Log grade			
		1	2	3	Tie and timber
Softwoods					
Jack pine	--	--	--	--	--
Red pine	19,850	--	--	19,850	--
White pine	64,178	1,457	515	62,206	--
Loblolly pine	2,238	--	962	1,276	--
Shortleaf pine	174,129	5,309	--	168,820	--
Baldcypress	49,221	1,117	395	47,709	--
Eastern redcedar	24,158	--	--	24,158	--
Other softwoods	3,989	--	--	3,989	--
Total	337,763	7,883	1,872	328,008	--
Hardwoods					
Select white oak	3,852,224	783,629	1,262,257	1,579,628	226,710
Other white oak	487,403	26,251	165,270	265,909	29,973
Select red oak	1,401,696	251,192	435,090	611,565	103,849
Other red oak	3,091,495	533,003	639,978	1,348,843	569,671
Select hickory	939,521	90,653	190,021	513,960	144,887
Other hickory	618,918	68,105	205,014	274,179	71,620
Basswood	207,192	51,356	34,923	92,585	28,328
Beech	55,428	2,079	5,192	36,107	12,050
Hard maple	533,289	22,538	80,662	369,134	60,955
Soft maple	1,232,555	173,660	377,234	545,522	136,139
Elm	483,407	19,956	92,000	294,078	77,373
Black ash	35,193	5,992	9,351	16,074	3,776
White & green ash	747,599	208,964	162,316	347,412	28,907
Sycamore	605,352	184,672	229,444	179,313	11,923
Cottonwood	709,863	193,742	167,428	291,401	57,292
Willow	165,985	--	28,993	108,473	28,519
Hackberry	285,326	42,828	57,137	145,293	40,068
Bigtooth aspen	1,839	313	489	840	197
Quaking aspen	--	--	--	--	--
River birch	104,729	5,541	26,710	67,107	5,371
Sweetgum	155,201	--	50,098	80,697	24,406
Tupelo	99,429	39,622	12,048	41,743	6,016
Black cherry	233,215	15,781	83,025	134,409	--
Black walnut	368,022	47,082	140,163	152,016	28,761
Butternut	9,927	6,172	3,755	--	--
Yellow-poplar	218,641	90,180	38,794	71,578	18,089
Other hardwoods	513,436	48,389	54,821	269,256	140,970
Total	17,156,885	2,911,700	4,552,213	7,837,122	1,855,850
All species	17,494,648	2,919,583	4,554,085	8,165,130	1,855,850

[1/] International 1/4-inch rule.

Table 59.--Net volume of sawtimber on timberland by species group, log grade and diameter class, Illinois, 1985

(In thousand board feet)[1/]

Species group	All grades					Log grade 1				
	Total	9.0-14.9	15.0-18.9	19.0-22.9	23.0+	Total	9.0-14.9	15.0-18.9	19.0-22.9	23.0+
Softwoods										
Jack pine	--	--	--	--	--	--	--	--	--	--
Red pine	19,850	19,850	--	--	--	--	--	--	--	--
White pine	64,178	48,776	11,358	4,044	--	729	635	--	94	--
Loblolly pine	2,238	1,276	962	--	--	--	--	--	--	--
Shortleaf pine	174,129	142,597	13,538	10,533	7,461	2,833	2,413	--	246	174
Baldcypress	49,221	2,896	12,473	6,802	27,050	828	38	--	159	631
Eastern redcedar	24,158	15,815	6,123	2,220	--	52	--	--	52	--
Other softwoods	3,989	3,989	--	--	--	--	--	--	--	--
Total	337,763	235,199	44,454	23,599	34,511	4,442	3,086	--	551	805
Hardwoods										
Select white oak	3,852,224	889,911	1,126,952	833,903	1,001,458	416,287	--	133,989	132,909	149,389
Other white oak	487,403	225,337	136,908	72,438	52,720	19,850	--	3,013	10,788	6,049
Select red oak	1,401,696	299,625	353,601	309,357	439,113	171,597	--	24,977	58,597	88,023
Other red oak	3,091,495	899,006	1,007,550	620,613	564,326	291,505	--	47,055	147,930	96,520
Select hickory	939,521	445,439	292,477	129,380	72,225	51,319	--	11,808	34,564	4,947
Other hickory	618,918	293,360	221,391	77,712	26,455	38,895	--	16,013	11,484	11,398
Basswood	207,192	65,598	81,851	21,656	38,087	36,100	--	6,755	4,349	24,996
Beech	55,428	4,478	13,200	17,401	20,349	1,265	--	--	1,265	--
Hard maple	533,289	166,261	185,627	104,149	77,252	12,269	--	5,882	6,387	--
Soft maple	1,232,555	348,635	351,894	236,171	295,855	82,727	--	31,743	18,364	32,620
Elm	483,407	280,240	129,639	44,999	28,529	10,056	--	--	3,132	6,924
Black ash	35,193	7,201	11,930	12,620	3,442	3,836	9	966	2,247	614
White & green ash	747,599	330,872	235,857	115,011	65,859	102,161	6,855	40,834	35,390	19,082
Sycamore	605,352	105,833	173,988	135,337	190,194	114,747	--	22,720	39,889	52,138
Cottonwood	709,863	87,812	150,330	154,618	317,103	104,376	--	5,055	5,722	93,599
Willow	165,985	76,750	45,237	20,334	23,664	--	--	--	--	--
Hackberry	285,326	112,306	64,194	60,347	48,479	18,715	--	--	11,608	7,107
Bigtooth aspen	1,839	--	1,839	--	--	149	--	149	--	--
Quaking aspen	--	--	--	--	--	--	--	--	--	--
River birch	104,729	59,300	18,240	8,158	19,031	2,521	--	2,521	--	--
Sweetgum	155,201	69,544	57,219	16,978	11,460	--	--	--	--	--
Tupelo	99,429	39,450	24,880	9,563	25,536	14,837	--	6,174	4,108	4,555
Black cherry	233,215	88,193	109,641	16,175	19,206	10,914	--	10,914	--	--
Black walnut	368,022	217,774	102,757	33,376	14,115	25,963	--	15,789	10,174	--
Butternut	9,927	4,478	5,449	--	--	2,716	--	2,716	--	--
Yellow-poplar	218,641	52,097	90,500	49,179	26,865	27,161	--	5,450	11,117	10,594
Other hardwoods	513,436	242,109	152,914	81,382	37,031	26,760	--	15,919	3,895	6,946
Total	17,156,885	5,411,609	5,146,065	3,180,857	3,418,354	1,586,726	6,864	410,442	553,919	615,501
All species	17,494,648	5,646,808	5,190,519	3,204,456	3,452,865	1,591,168	9,950	410,442	554,470	616,306

[1/] International 1/4-inch rule.

(Table 59 continued on the next page)

(Table 59 continued)

Species group	Log grade 2					Log grades 3 and 4				
	Total	9.0-14.9	15.0-18.9	19.0-22.9	23.0+	Total	9.0-14.9	15.0-18.9	19.0-22.9	23.0+
Softwoods										
Jack pine	--	--	--	--	--	--	--	--	--	--
Red pine	294	294	--	--	--	19,556	19,556	--	--	--
White pine	1,570	927	621	22	--	61,879	47,214	10,737	3,928	--
Loblolly pine	574	19	555	--	--	1,664	1,257	407	--	--
Shortleaf pine	2,989	2,890	--	58	41	168,307	137,294	13,538	10,229	7,246
Baldcypress	925	55	682	38	150	47,468	2,803	11,791	6,605	26,269
Eastern redcedar	251	239	--	12	--	23,855	15,576	6,123	2,156	--
Other softwoods	59	59	--	--	--	3,930	3,930	--	--	--
Total	6,662	4,483	1,858	130	191	326,659	227,630	42,596	22,918	33,515
Hardwoods										
Select white oak	960,449	178,844	304,962	234,692	241,951	2,475,488	711,067	688,001	466,302	610,118
Other white oak	134,472	25,431	54,941	25,114	28,986	333,081	199,906	78,954	36,536	17,685
Select red oak	349,571	33,034	85,918	110,057	120,562	880,528	266,591	242,706	140,703	230,528
Other red oak	508,157	76,375	165,974	163,131	102,677	2,291,833	822,631	794,521	309,552	365,129
Select hickory	107,436	15,437	47,186	28,484	16,329	780,766	430,002	233,483	66,332	50,949
Other hickory	123,603	19,807	73,476	17,034	13,286	456,420	273,553	131,902	49,194	1,771
Basswood	31,963	8,113	16,516	2,052	5,282	139,129	57,485	58,580	15,255	7,809
Beech	4,721	--	1,194	1,679	1,848	49,442	4,478	12,006	14,457	18,501
Hard maple	59,716	4,768	27,340	27,608	--	461,304	161,493	152,405	70,154	77,252
Soft maple	269,171	36,015	60,673	82,034	90,449	880,657	312,620	259,478	135,773	172,786
Elm	55,443	15,244	15,928	20,770	3,501	417,908	264,996	113,711	21,097	18,104
Black ash	7,652	729	2,716	3,381	826	23,705	6,463	8,248	6,992	2,002
White & green ash	145,078	28,759	63,714	33,142	19,463	500,360	295,258	131,309	46,479	27,314
Sycamore	176,339	10,218	63,960	26,550	75,611	314,266	95,615	87,308	68,898	62,445
Cottonwood	122,833	3,746	44,092	13,383	61,612	482,654	84,066	101,183	135,513	161,892
Willow	16,513	--	9,901	--	6,612	149,472	76,750	35,336	20,334	17,052
Hackberry	37,470	5,646	12,154	12,791	6,879	229,141	106,660	52,040	35,948	34,493
Bigtooth aspen	419	--	419	--	--	1,271	--	1,271	--	--
Quaking aspen	--	--	--	--	--	--	--	--	--	--
River birch	19,675	1,926	7,748	4,871	5,130	82,533	57,374	7,971	3,287	13,901
Sweetgum	26,317	12,139	9,274	4,904	--	128,884	57,405	47,945	12,074	11,460
Tupelo	15,822	3,753	2,826	3,113	6,130	68,770	35,697	15,880	2,342	14,851
Black cherry	44,532	1,769	26,365	2,401	13,997	177,769	86,424	72,362	13,774	5,209
Black walnut	82,838	38,426	32,106	7,570	4,736	259,221	179,348	54,862	15,632	9,379
Butternut	3,223	1,981	1,242	--	--	3,988	2,497	1,491	--	--
Yellow-poplar	40,183	4,988	12,806	16,012	6,377	151,297	47,109	72,244	22,050	9,894
Other hardwoods	48,702	13,172	26,097	7,966	1,467	437,974	228,937	110,898	69,521	28,618
Total	3,392,298	540,320	1,169,528	848,739	833,711	12,177,861	4,864,425	3,566,095	1,778,199	1,969,142
All species	3,398,960	544,803	1,171,386	848,869	833,902	12,504,520	5,092,055	3,608,691	1,801,117	2,002,657

Table 60.--Net volume of short-log trees on timberland by species group and diameter class, Illinois, 1985

(In thousand cubic feet)

Species group	All classes	Diameter class (inches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-28.9	29.0-38.9	39.0+
Softwoods											
Jack pine	--	--	--	--	--	--	--	--	--	--	--
Red pine	--	--	--	--	--	--	--	--	--	--	--
White pine	--	--	--	--	--	--	--	--	--	--	--
Loblolly pine	--	--	--	--	--	--	--	--	--	--	--
Shortleaf pine	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	--	--	--	--	--	--	--	--	--	--	--
Eastern redcedar	293	--	--	--	--	--	--	293	--	--	--
Other softwoods	217	217	--	--	--	--	--	--	--	--	--
Total	510	217	--	--	--	--	--	293	--	--	--
Hardwoods											
Select white oak	28,464	--	1,120	1,596	1,148	1,813	1,365	1,493	8,151	9,360	2,418
Other white oak	2,195	--	237	106	113	236	293	228	484	--	498
Select red oak	8,420	--	--	304	--	712	1,254	179	3,098	2,273	600
Other red oak	20,728	--	1,885	2,224	1,599	1,055	2,324	2,495	5,995	2,915	236
Select hickory	6,327	--	1,612	1,240	642	732	1,300	573	228	--	--
Other hickory	1,071	--	113	553	--	--	--	--	405	--	--
Basswood	885	--	202	--	--	256	--	--	427	--	--
Beech	931	--	571	--	--	--	122	--	238	--	--
Hard maple	8,798	--	758	872	857	1,475	619	256	2,224	1,449	288
Soft maple	13,901	--	1,887	2,017	724	259	1,093	1,404	2,689	2,928	900
Elm	8,413	--	3,926	1,726	694	456	487	220	654	250	--
Black ash	208	--	--	208	--	--	--	--	--	--	--
White & green ash	9,056	--	1,726	1,232	1,447	1,000	--	1,550	1,096	1,005	--
Sycamore	2,499	--	--	272	--	248	543	332	384	720	--
Cottonwood	8,201	--	198	--	--	238	266	--	939	3,735	2,825
Willow	3,963	--	637	135	256	--	228	852	775	--	1,080
Hackberry	2,907	--	483	403	560	--	230	--	986	--	245
Bigtooth aspen	--	--	--	--	--	--	--	--	--	--	--
Quaking aspen	--	--	--	--	--	--	--	--	--	--	--
River birch	423	--	--	--	--	161	--	--	262	--	--
Sweetgum	342	--	131	--	211	--	--	--	--	--	--
Tupelo	--	--	--	--	--	--	--	--	--	--	--
Black cherry	2,283	--	405	460	271	232	274	--	166	475	--
Black walnut	4,018	--	255	1,911	959	257	271	--	365	--	--
Butternut	240	--	240	--	--	--	--	--	--	--	--
Yellow-poplar	372	--	--	257	--	115	--	--	--	--	--
Other hardwoods	12,914	--	3,325	2,971	1,838	1,006	1,154	1,363	977	280	--
Total	147,559	--	19,711	18,487	11,319	10,251	11,823	10,945	30,543	25,390	9,090
All species	148,069	217	19,711	18,487	11,319	10,251	11,823	11,238	30,543	25,390	9,090

Table 61.--Net volume of short-log trees on timberland by species group and diameter class, Illinois, 1985

(In thousand board feet)[1/]

Species group	All classes	Diameter class (inches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0-28.9	29.0-38.9	39.0+
Softwoods											
Jack pine	--	--	--	--	--	--	--	--	--	--	--
Red pine	--	--	--	--	--	--	--	--	--	--	--
White pine	--	--	--	--	--	--	--	--	--	--	--
Loblolly pine	--	--	--	--	--	--	--	--	--	--	--
Shortleaf pine	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	--	--	--	--	--	--	--	--	--	--	--
Eastern redcedar	803	--	--	--	--	--	--	803	--	--	--
Other softwoods	1,095	1,095	--	--	--	--	--	--	--	--	--
Total	1,898	1,095	--	--	--	--	--	803	--	--	--
Hardwoods											
Select white oak	80,359	--	4,155	5,572	3,802	5,614	4,185	4,238	21,592	24,798	6,403
Other white oak	6,500	--	879	371	375	731	897	646	1,281	--	1,320
Select red oak	23,441	--	--	1,060	--	2,206	3,846	507	8,209	6,023	1,590
Other red oak	61,765	--	7,000	7,768	5,290	3,268	7,127	7,085	15,882	7,720	625
Select hickory	20,911	--	5,982	4,328	2,123	2,264	3,984	1,626	604	--	--
Other hickory	3,424	--	421	1,929	--	--	--	--	1,074	--	--
Basswood	2,674	--	751	--	--	793	--	--	1,130	--	--
Beech	3,123	--	2,118	--	--	--	375	--	630	--	--
Hard maple	26,384	--	2,812	3,044	2,840	4,568	1,899	726	5,893	3,838	764
Soft maple	41,839	--	7,004	7,039	2,397	803	3,348	3,987	7,123	7,753	2,385
Elm	28,815	--	14,567	6,029	2,298	1,412	1,494	625	1,730	660	--
Black ash	727	--	--	727	--	--	--	--	--	--	--
White & green ash	28,573	--	6,409	4,305	4,793	3,100	--	4,402	2,901	2,663	--
Sycamore	7,252	--	--	950	--	769	1,666	943	1,017	1,907	--
Cottonwood	22,149	--	733	--	--	737	817	--	2,487	9,894	7,481
Willow	11,712	--	2,363	469	848	--	698	2,420	2,052	--	2,862
Hackberry	9,024	--	1,792	1,409	1,854	--	706	--	2,614	--	649
Bigtooth aspen	--	--	--	--	--	--	--	--	--	--	--
Quaking aspen	--	--	--	--	--	--	--	--	--	--	--
River birch	1,194	--	--	--	--	499	--	--	695	--	--
Sweetgum	1,181	--	484	--	697	--	--	--	--	--	--
Tupelo	--	--	--	--	--	--	--	--	--	--	--
Black cherry	7,260	--	1,502	1,606	898	719	839	--	439	1,257	--
Black walnut	13,385	--	946	6,672	3,172	797	832	--	966	--	--
Butternut	891	--	891	--	--	--	--	--	--	--	--
Yellow-poplar	1,256	--	--	899	--	357	--	--	--	--	--
Other hardwoods	42,650	--	12,336	10,375	6,086	3,114	3,537	3,872	2,588	742	--
Total	446,489	--	73,145	64,552	37,473	31,751	36,250	31,077	80,907	67,255	24,079
All species	448,387	1,095	73,145	64,552	37,473	31,751	36,250	31,880	80,907	67,255	24,079

[1/] International 1/4-inch rule.

Table 62.--Net annual growth of growing stock on timberland by species group, Illinois, 1961 and 1984

(In thousand cubic feet)

Species group	1961 [1/]	1984
Softwoods	2,038	3,224
Hardwoods	122,993	92,791
All species	125,031	96,015

[1/] Figures have been adjusted from those published after the 1962 survey to conform to 1984 volumes because of changes in survey procedures.

Table 63.--Net annual growth of growing stock on timberland by species group and Forest Survey Unit, Illinois, 1984

(In thousand cubic feet)

Species group	All Units	Forest Survey Unit		
		Southern Unit	Claypan Unit	Prairie Unit
Softwoods				
Jack pine	36	--	36	--
Red pine	310	--	--	310
White pine	393	170	5	218
Loblolly pine	26	26	--	--
Shortleaf pine	1,891	1,755	136	--
Baldcypress	13	13	--	--
Eastern redcedar	445	299	12	134
Other softwoods	110	64	--	46
Total	3,224	2,327	189	708
Hardwoods				
Select white oak	14,409	3,401	5,144	5,864
Other white oak	666	393	235	38
Select red oak	5,459	930	1,475	3,054
Other red oak	12,893	3,603	5,110	4,180
Select hickory	3,773	949	1,409	1,415
Other hickory	3,670	1,516	908	1,246
Basswood	1,215	15	155	1,045
Beech	242	237	5	--
Hard maple	3,717	1,172	867	1,678
Soft maple	14,144	3,619	4,910	5,615
Elm	-5,106	-1,013	-1,877	-2,216
Black ash	228	191	-2	39
White & green ash	6,704	1,981	2,691	2,032
Sycamore	2,412	887	1,154	371
Cottonwood	1,976	810	529	637
Willow	1,427	272	210	945
Hackberry	5,683	632	2,850	2,201
Bigtooth aspen	8	--	--	8
Quaking aspen	20	--	--	20
River birch	1,257	782	246	229
Sweetgum	1,163	1,080	83	--
Tupelo	209	210	-1	--
Black cherry	3,663	124	1,217	2,322
Black walnut	2,279	196	811	1,272
Butternut	105	20	41	44
Yellow-poplar	1,609	1,375	207	27
Other hardwoods	8,966	2,035	4,042	2,889
Total	92,791	25,417	32,419	34,955
All species	96,015	27,744	32,608	35,663

Table 64.--Net annual growth of sawtimber on timberland by species group and Forest Survey Unit, Illinois, 1984

(In thousand board feet)[1/]

Species group	All Units	Forest Survey Unit		
		Southern Unit	Claypan Unit	Prairie Unit
Softwoods				
Jack pine	--	--	--	--
Red pine	4,312	--	--	4,312
White pine	2,853	--	28	2,825
Loblolly pine	35	35	--	--
Shortleaf pine	4,087	4,087	--	--
Baldcypress	90	90	--	--
Eastern redcedar	360	214	26	120
Other softwoods	106	--	--	106
Total	11,843	4,426	54	7,363
Hardwoods				
Select white oak	80,721	13,337	35,688	31,696
Other white oak	4,512	2,032	2,411	69
Select red oak	26,641	6,254	9,246	11,141
Other red oak	77,010	18,818	37,075	21,117
Select hickory	15,208	4,373	6,668	4,167
Other hickory	15,502	8,778	4,303	2,421
Basswood	8,060	15	1,774	6,271
Beech	1,488	1,488	--	--
Hard maple	14,466	2,308	4,468	7,690
Soft maple	44,147	13,854	16,052	14,241
Elm	-9,780	-2,044	-6,027	-1,709
Black ash	-103	--	-111	8
White & green ash	27,437	6,599	13,034	7,804
Sycamore	9,518	3,725	5,560	233
Cottonwood	11,237	2,252	4,027	4,958
Willow	9,893	2,166	715	7,012
Hackberry	14,781	1,034	8,441	5,306
Bigtooth aspen	43	--	--	43
Quaking aspen	--	--	--	--
River birch	7,414	4,806	775	1,833
Sweetgum	3,509	3,243	266	--
Tupelo	942	925	17	--
Black cherry	16,385	545	6,748	9,092
Black walnut	14,142	409	8,525	5,208
Butternut	131	27	23	81
Yellow-poplar	8,435	6,113	2,187	135
Other hardwoods	23,564	5,313	7,535	10,716
Total	425,303	106,370	169,400	149,533
All species	437,146	110,796	169,454	156,896

[1/] International 1/4-inch rule.

Table 65.--Net annual growth of growing stock on timberland by species group and ownership class, Illinois, 1984

(In thousand cubic feet)

Species group	All owners	Ownership class							
		National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. priv.-corp.	Misc. priv.-indiv.
Softwoods									
Jack pine	36	--	--	--	--	--	--	--	36
Red pine	310	--	--	--	--	--	130	6	174
White pine	393	170	--	80	--	--	128	--	15
Loblolly pine	26	26	--	--	--	--	--	--	--
Shortleaf pine	1,891	1,571	-7	--	--	--	--	191	136
Baldcypress	13	--	--	-38	--	--	51	--	--
Eastern redcedar	445	19	--	--	--	--	118	--	308
Other softwoods	110	--	--	--	--	--	--	47	63
Total	3,224	1,786	-7	42	--	--	427	244	732
Hardwoods									
Select white oak	14,409	1,134	126	85	143	41	5,733	910	6,237
Other white oak	666	61	-2	-9	--	--	297	29	290
Select red oak	5,459	-94	-5	8	76	27	2,598	514	2,335
Other red oak	12,893	749	130	276	47	-1	5,962	601	5,129
Select hickory	3,773	11	-25	--	169	8	2,077	37	1,496
Other hickory	3,670	313	18	47	5	20	1,727	106	1,434
Basswood	1,215	9	--	--	40	--	817	73	276
Beech	242	82	--	--	--	--	63	16	81
Hard maple	3,717	333	14	--	104	--	1,531	51	1,684
Soft maple	14,144	119	658	74	388	--	5,234	1,024	6,647
Elm	-5,106	29	-204	-30	-173	--	-2,172	-413	-2,143
Black ash	228	--	--	--	--	--	181	17	30
White & green ash	6,704	197	84	9	13	16	2,944	690	2,751
Sycamore	2,412	111	13	7	--	58	1,060	180	983
Cottonwood	1,976	--	-182	95	--	4	1,065	321	673
Willow	1,427	-72	28	3	--	--	667	130	671
Hackberry	5,683	17	206	58	279	9	3,002	224	1,888
Bigtooth aspen	8	--	--	--	--	--	8	--	--
Quaking aspen	20	--	--	--	--	--	--	--	20
River birch	1,257	26	12	26	--	--	366	216	611
Sweetgum	1,163	151	97	--	24	--	363	16	512
Tupelo	209	75	--	-76	--	--	197	--	13
Black cherry	3,663	-19	1	4	196	--	1,522	183	1,776
Black walnut	2,279	57	--	64	10	35	1,027	60	1,026
Butternut	105	3	--	--	--	--	57	--	45
Yellow-poplar	1,609	432	213	--	--	--	484	15	465
Other hardwoods	8,966	251	79	48	196	150	3,955	424	3,863
Total	92,791	3,975	1,261	689	1,517	367	40,765	5,424	38,793
All species	96,015	5,761	1,254	731	1,517	367	41,192	5,668	39,525

Table 66.--Net annual growth of sawtimber on timberland by species group and ownership class, Illinois, 1984

(In thousand board feet)[1/]

Species group	All owners	Ownership class: National Forest	Misc. federal	State	County & municipal	Forest industry	Farmer	Misc. priv.-corp.	Misc. priv.-indiv.
Softwoods									
Jack pine	--	--	--	--	--	--	--	--	--
Red pine	4,312	--	--	--	--	--	1,238	--	3,074
White pine	2,853	--	--	403	--	--	2,371	--	79
Loblolly pine	35	35	--	--	--	--	--	--	--
Shortleaf pine	4,087	3,088	-116	--	--	--	--	1,115	--
Baldcypress	90	--	--	-208	--	--	298	--	--
Eastern redcedar	360	167	--	--	--	--	8	--	185
Other softwoods	106	--	--	--	--	--	--	106	--
Total	11,843	3,290	-116	195	--	--	3,915	1,221	3,338
Hardwoods									
Select white oak	80,721	6,099	3,177	268	412	210	29,106	4,681	36,768
Other white oak	4,512	261	-29	-37	--	--	1,251	22	3,044
Select red oak	26,641	755	106	37	342	1,528	8,218	3,974	11,681
Other red oak	77,010	3,610	1,489	593	198	-6	38,558	1,195	31,373
Select hickory	15,208	774	-169	-77	62	42	7,499	-267	7,344
Other hickory	15,502	104	-49	67	21	107	4,684	1,501	9,067
Basswood	8,060	15	--	--	212	--	5,494	240	2,099
Beech	1,488	743	--	--	--	--	145	84	516
Hard maple	14,466	744	--	--	1,882	--	7,536	138	4,166
Soft maple	44,147	100	1,474	217	734	--	16,080	4,580	20,962
Elm	-9,780	-461	-307	-110	784	--	-8,940	1,078	-1,824
Black ash	-103	--	--	--	--	--	-138	--	35
White & green ash	27,437	589	1,421	42	68	--	14,666	532	10,119
Sycamore	9,518	698	29	104	--	315	4,876	415	3,081
Cottonwood	11,237	--	-1,069	--	--	14	5,202	661	6,429
Willow	9,893	-354	168	-151	--	--	7,198	310	2,722
Hackberry	14,781	--	--	93	2,001	--	8,931	682	3,074
Bigtooth aspen	43	--	--	--	--	--	43	--	--
Quaking aspen	--	--	--	--	--	--	--	--	--
River birch	7,414	231	--	87	--	--	4,021	1,387	1,688
Sweetgum	3,509	494	312	--	119	--	1,348	53	1,183
Tupelo	942	-41	--	1,002	--	--	51	-27	-43
Black cherry	16,385	--	1,135	--	125	--	3,430	266	11,429
Black walnut	14,142	31	--	278	48	113	8,903	104	4,665
Butternut	131	15	--	--	--	--	96	--	20
Yellow-poplar	8,435	1,017	1,069	--	--	--	2,813	76	3,460
Other hardwoods	23,564	540	90	1,472	83	194	9,849	2,214	9,122
Total	425,303	15,964	8,847	3,885	7,091	2,517	180,920	23,899	182,180
All species	437,146	19,254	8,731	4,080	7,091	2,517	184,835	25,120	185,518

[1/] International 1/4-inch rule.

Table 67.--Net annual growth of growing stock on timberland by species group and forest type, Illinois, 1984

(In thousand cubic feet)

Species group	All types	Forest type								
		White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
Softwoods										
Jack pine	36	36	--	--	--	--	--	--	--	--
Red pine	310	294	--	6	10	--	--	--	--	--
White pine	393	383	--	--	10	--	--	--	--	--
Loblolly pine	26	--	--	--	26	--	--	--	--	--
Shortleaf pine	1,891	136	1,674	67	14	--	--	--	--	--
Baldcypress	13	--	--	--	--	-38	--	--	51	--
Eastern redcedar	445	--	--	206	118	--	--	--	121	--
Other softwoods	110	--	--	47	16	--	--	--	47	--
Total	3,224	849	1,674	326	194	-38	--	--	219	--
Hardwoods										
Select white oak	14,409	208	--	22	12,180	-61	351	--	1,699	10
Other white oak	666	--	-20	9	608	18	43	--	8	--
Select red oak	5,459	--	--	3	4,236	50	100	6	1,064	--
Other red oak	12,893	186	88	14	9,275	980	782	31	1,537	--
Select hickory	3,773	--	6	--	2,871	66	70	--	760	--
Other hickory	3,670	--	9	11	2,724	26	111	--	789	--
Basswood	1,215	--	--	--	349	--	71	--	795	--
Beech	242	--	--	--	91	5	13	--	133	--
Hard maple	3,717	--	20	--	1,244	4	129	--	2,320	--
Soft maple	14,144	--	108	--	1,010	196	11,343	271	1,159	57
Elm	-5,106	-1	81	-23	-1,307	-236	-1,762	-129	-1,724	-5
Black ash	228	--	--	--	22	--	10	--	196	--
White & green ash	6,704	--	--	12	2,531	267	1,307	--	2,594	-7
Sycamore	2,412	--	--	7	670	119	1,054	--	562	--
Cottonwood	1,976	--	--	6	367	34	1,300	67	202	--
Willow	1,427	--	--	--	114	72	1,168	--	73	--
Hackberry	5,683	--	--	--	1,613	68	3,238	--	764	--
Bigtooth aspen	8	--	--	--	--	--	--	--	8	--
Quaking aspen	20	--	--	--	--	--	--	--	20	--
River birch	1,257	--	--	--	40	30	1,017	--	170	--
Sweetgum	1,163	--	8	29	164	512	250	--	200	--
Tupelo	209	--	--	--	170	44	1	--	-6	--
Black cherry	3,663	3	--	3	1,353	51	62	4	2,187	--
Black walnut	2,279	--	13	--	812	--	275	5	1,174	--
Butternut	105	--	--	--	7	6	33	--	59	--
Yellow-poplar	1,609	--	129	17	342	80	149	--	892	--
Other hardwoods	8,966	--	32	11	2,512	378	3,018	78	2,937	--
Total	92,791	396	474	121	43,998	2,709	24,133	333	20,572	55
All species	96,015	1,245	2,148	447	44,192	2,671	24,133	333	20,791	55

Table 68.--Net annual growth of sawtimber on timberland by species group and forest type, Illinois, 1984

(In thousand board feet)[1/]

Species group	All types	Forest type								
		White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
Softwoods										
Jack pine	--	--	--	--	--	--	--	--	--	--
Red pine	4,312	4,265	--	--	47	--	--	--	--	--
White pine	2,853	2,802	--	--	51	--	--	--	--	--
Loblolly pine	35	--	--	--	35	--	--	--	--	--
Shortleaf pine	4,087	--	3,582	431	74	--	--	--	--	--
Baldcypress	90	--	--	--	--	-208	--	--	298	--
Eastern redcedar	360	--	--	-19	233	--	--	--	146	--
Other softwoods	106	--	--	106	--	--	--	--	--	--
Total	11,843	7,067	3,582	518	440	-208	--	--	444	--
Hardwoods										
Select white oak	80,721	--	--	53	69,225	-477	1,102	--	10,768	50
Other white oak	4,512	--	-114	--	4,352	91	113	--	70	--
Select red oak	26,641	--	--	39	21,655	125	271	30	4,521	--
Other red oak	77,010	--	341	31	53,709	11,574	5,445	--	5,910	--
Select hickory	15,208	--	309	--	12,650	206	-261	--	2,304	--
Other hickory	15,502	--	47	--	5,982	1,813	370	--	7,290	--
Basswood	8,060	--	--	--	5,063	--	262	--	2,735	--
Beech	1,488	--	--	--	450	26	64	--	948	--
Hard maple	14,466	--	--	--	6,396	20	251	--	7,799	--
Soft maple	44,147	--	100	--	1,395	3,675	34,962	636	3,379	--
Elm	-9,780	--	115	-67	-1,765	-629	-2,095	--	-5,339	--
Black ash	-103	--	--	--	8	--	-111	--	--	--
White & green ash	27,437	--	--	1	13,187	729	2,064	--	11,490	-34
Sycamore	9,518	--	--	35	2,061	191	5,961	--	1,270	--
Cottonwood	11,237	--	--	28	2,561	165	5,609	721	2,153	--
Willow	9,893	--	--	--	218	-18	9,484	-46	255	--
Hackberry	14,781	--	--	--	2,713	81	9,189	--	2,798	--
Bigtooth aspen	43	--	--	--	--	--	--	--	43	--
Quaking aspen	--	--	--	--	--	--	--	--	--	--
River birch	7,414	--	--	--	-85	129	5,445	--	1,925	--
Sweetgum	3,509	--	--	135	807	1,412	878	--	277	--
Tupelo	942	--	--	--	-31	1,027	30	--	-84	--
Black cherry	16,385	--	--	--	9,488	83	331	--	6,483	--
Black walnut	14,142	--	--	--	4,777	--	4,649	-5	4,721	--
Butternut	131	--	--	--	8	--	38	--	85	--
Yellow-poplar	8,435	--	--	10	1,139	287	1,601	--	5,398	--
Other hardwoods	23,564	--	35	4	9,022	217	5,006	2,611	6,669	--
Total	425,303	--	833	269	224,985	20,727	90,658	3,947	83,868	16
All species	437,146	7,067	4,415	787	225,425	20,519	90,658	3,947	84,312	16

[1/] International 1/4-inch rule.

Table 69.--Net annual growth of growing stock on timberland by forest type and stand-age class, Illinois, 1984

(In thousand cubic feet)

Forest type	All ages	Stand-age class (years)												
		1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-120	121-140	141+
White pine	1,245	--	170	434	561	80	--	--	--	--	--	--	--	--
Loblolly-shortleaf pine	2,148	--	128	1,593	101	33	298	--	-5	--	--	--	--	--
Oak-pine	447	216	40	182	--	--	9	--	--	--	--	--	--	--
Oak-hickory	44,192	1,028	2,393	2,055	4,141	5,842	3,326	6,069	7,310	3,884	3,979	2,743	1,514	-92
Oak-gum-cypress	2,671	59	248	648	367	491	484	269	252	-163	46	126	--	-156
Elm-ash-soft maple	24,133	460	1,034	4,446	4,635	3,232	2,052	3,352	2,331	1,516	641	248	186	--
Cottonwood	333	59	118	109	--	91	-489	447	--	-2	--	--	--	--
Maple-beech	20,791	2,435	2,403	2,428	2,292	1,728	2,381	2,965	1,081	971	851	734	522	--
Nonstocked	55	55	--	--	--	--	--	--	--	--	--	--	--	--
All types	96,015	4,312	6,534	11,895	12,097	11,497	8,061	13,102	10,969	6,206	5,517	3,851	2,222	-248

Table 70.--Net annual growth of sawtimber on timberland by forest type and stand-age class, Illinois, 1984

(In thousand board feet)[1/]

Forest type	All ages	Stand-age class (years)												
		1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-120	121-140	141+
White pine	7,067	--	--	3,637	3,027	403	--	--	--	--	--	--	--	--
Loblolly-shortleaf pine	4,415	--	--	2,626	609	724	572	--	-116	--	--	--	--	--
Oak-pine	787	-19	53	616	--	--	137	--	--	--	--	--	--	--
Oak-hickory	225,425	1,464	4,176	3,772	11,820	22,645	19,096	33,052	52,990	20,412	32,308	16,684	7,739	-733
Oak-gum-cypress	20,519	253	--	7,116	744	6,189	2,095	2,475	916	-955	1,096	-59	--	649
Elm-ash-soft maple	90,658	683	1,421	13,013	13,477	13,259	9,085	15,564	13,571	6,078	3,771	235	501	--
Cottonwood	3,947	--	1,517	173	--	1,664	-1,775	2,382	--	-14	--	--	--	--
Maple-beech	84,312	5,305	5,324	8,026	11,160	6,480	19,385	12,050	7,439	3,968	1,657	3,284	234	--
Nonstocked	16	16	--	--	--	--	--	--	--	--	--	--	--	--
All types	437,146	7,702	12,491	38,979	40,837	51,364	48,595	65,523	74,800	29,489	38,832	20,144	8,474	-84

[1/] International 1/4-inch rule.

Table 71.--Net annual growth of growing stock on timberland by forest type, stand-size class, and basal-area class, Illinois, 1984

(In thousand cubic feet)

Forest type and stand-size class	All classes	Basal area class (square feet per acre)													
		0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-120	121-150	151-180	181+
White pine															
Sawtimber	641	--	--	--	--	--	--	--	--	--	--	561	80	--	--
Poletimber	434	--	--	--	--	--	--	--	177	--	--	127	130	--	--
Sapling & seedling	170	--	--	--	--	--	--	--	--	170	--	--	--	--	--
All stands	1,245	--	--	--	--	--	--	--	177	170	--	688	210	--	--
Loblolly-shortleaf pine															
Sawtimber	266	--	--	--	--	--	--	--	--	-5	--	137	134	--	--
Poletimber	1,754	--	--	--	--	--	--	--	298	--	--	714	--	--	742
Sapling & seedling	128	--	--	--	128	--	--	--	--	--	--	--	--	--	--
All stands	2,148	--	--	--	128	--	--	--	298	-5	--	851	134	--	742
Oak-pine															
Sawtimber	53	--	--	--	--	--	--	--	--	--	--	53	--	--	--
Poletimber	138	--	--	--	--	--	--	--	--	--	--	58	80	--	--
Sapling & seedling	256	--	--	--	--	--	40	--	216	--	--	--	--	--	--
All stands	447	--	--	--	--	--	40	--	216	--	--	111	80	--	--
Oak-hickory															
Sawtimber	28,967	--	52	111	150	353	1,929	1,302	5,520	5,200	4,151	7,455	2,588	156	--
Poletimber	11,804	--	--	--	--	1,137	1,126	704	3,285	2,569	1,483	1,345	155	--	--
Sapling & seedling	3,421	11	294	224	74	1,556	644	404	131	83	--	--	--	--	--
All stands	44,192	11	346	335	224	3,046	3,699	2,410	8,936	7,852	5,634	8,800	2,743	156	--
Oak-gum-cypress															
Sawtimber	1,850	--	--	--	65	124	187	209	170	284	--	445	522	--	-156
Poletimber	514	--	--	--	--	139	--	124	--	121	--	76	54	--	--
Sapling & seedling	307	--	--	248	--	--	--	--	--	59	--	--	--	--	--
All stands	2,671	--	--	248	65	263	187	333	170	464	--	521	576	--	-156
Elm-ash-soft maple															
Sawtimber	15,428	--	--	--	192	158	1,058	898	1,583	1,661	2,024	2,174	4,530	1,227	-77
Poletimber	6,890	--	--	--	124	--	1,005	642	894	1,266	335	2,624	--	--	--
Sapling & seedling	1,815	--	107	121	35	122	127	649	543	--	111	--	--	--	--
All stands	24,133	--	107	121	351	280	2,190	2,189	3,020	2,927	2,470	4,798	4,530	1,227	-77
Cottonwood															
Sawtimber	65	--	18	--	-2	--	--	--	--	--	--	215	323	--	-489
Poletimber	91	--	--	--	--	--	91	--	--	--	--	--	--	--	--
Sapling & seedling	177	--	76	59	--	--	42	--	--	--	--	--	--	--	--
All stands	333	--	94	59	-2	--	133	--	--	--	--	215	323	--	-489
Maple-beech															
Sawtimber	10,678	--	4	-57	128	538	775	441	2,748	1,032	1,312	2,502	1,255	--	--
Poletimber	4,760	--	--	231	44	753	504	449	646	861	255	1,017	--	--	--
Sapling & seedling	5,353	54	265	826	635	1,031	790	75	1,449	228	--	--	--	--	--
All stands	20,791	54	269	1,000	807	2,322	2,069	965	4,843	2,121	1,567	3,519	1,255	--	--
Nonstocked	55	--	--	60	--	--	-5	--	--	--	--	--	--	--	--
All types															
Sawtimber	57,948	--	74	54	533	1,173	3,949	2,850	10,021	8,172	7,487	13,542	9,432	1,383	-722
Poletimber	26,385	--	--	231	168	2,029	2,726	1,919	5,300	4,817	2,073	5,961	419	--	742
Sapling & seedling	11,627	65	742	1,478	872	2,709	1,643	1,128	2,339	540	111	--	--	--	--
Nonstocked	55	--	--	60	--	--	-5	--	--	--	--	--	--	--	--
All stands	96,015	65	816	1,823	1,573	5,911	8,313	5,897	17,660	13,529	9,671	19,503	9,851	1,383	20

Table 72.--Net annual growth of sawtimber on timberland by forest type, stand-size class, and basal-area class, Illinois, 1984

(In thousand board feet)[1/]

Forest type and stand-size class	All classes	Basal area class (square feet per acre)													
		0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-120	121-150	151-180	181+
White pine															
Sawtimber	3,430	--	--	--	--	--	--	--	--	--	--	3,027	403	--	--
Poletimber	3,637	--	--	--	--	--	--	--	28	--	--	1,074	2,535	--	--
Sapling & seedling	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All stands	7,067	--	--	--	--	--	--	--	28	--	--	4,101	2,938	--	--
Loblolly-shortleaf pine															
Sawtimber	2,201	--	--	--	--	--	--	--	--	-116	--	984	1,333	--	--
Poletimber	2,214	--	--	--	--	--	--	--	572	--	--	804	--	--	838
Sapling & seedling	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
All stands	4,415	--	--	--	--	--	--	--	572	-116	--	1,788	1,333	--	838
Oak-pine															
Sawtimber	191	--	--	--	--	--	--	--	--	--	--	191	--	--	--
Poletimber	562	--	--	--	--	--	--	--	--	--	--	362	200	--	--
Sapling & seedling	34	--	--	--	--	--	53	--	-19	--	--	--	--	--	--
All stands	787	--	--	--	--	--	53	--	-19	--	--	553	200	--	--
Oak-hickory															
Sawtimber	184,910	--	85	171	471	783	4,885	5,564	39,960	35,075	21,761	47,315	27,848	992	--
Poletimber	34,875	--	--	--	--	840	4,246	357	9,519	10,729	5,202	3,624	358	--	--
Sapling & seedling	5,640	--	28	2,004	-12	1,175	1,688	296	360	101	--	--	--	--	--
All stands	225,425	--	113	2,175	459	2,798	10,819	6,217	49,839	45,905	26,963	50,939	28,206	992	--
Oak-gum-cypress															
Sawtimber	13,799	--	--	--	273	1,348	650	731	59	4,304	--	3,737	2,048	--	649
Poletimber	6,467	--	--	--	--	1,540	--	1,838	--	2,904	--	140	45	--	--
Sapling & seedling	253	--	--	--	--	--	--	--	--	253	--	--	--	--	--
All stands	20,519	--	--	--	273	2,888	650	2,569	59	7,461	--	3,877	2,093	--	649
Elm-ash-soft maple															
Sawtimber	68,209	--	--	--	2,947	345	3,769	5,761	6,168	9,101	7,455	12,877	14,158	6,021	-393
Poletimber	20,302	--	--	--	115	--	1,566	2,041	1,945	4,444	480	9,711	--	--	--
Sapling & seedling	2,147	--	171	187	--	32	273	1,208	276	--	--	--	--	--	--
All stands	90,658	--	171	187	3,062	377	5,608	9,010	8,389	13,545	7,935	22,588	14,158	6,021	-393
Cottonwood															
Sawtimber	2,323	--	66	--	-14	--	--	--	--	--	--	1,722	2,324	--	-1,775
Poletimber	107	--	--	--	--	--	107	--	--	--	--	--	--	--	--
Sapling & seedling	1,517	--	1,527	--	--	--	-10	--	--	--	--	--	--	--	--
All stands	3,947	--	1,593	--	-14	--	97	--	--	--	--	1,722	2,324	--	-1,775
Maple-beech															
Sawtimber	49,064	--	19	-298	372	1,039	5,700	3,545	11,397	4,695	5,179	13,616	3,800	--	--
Poletimber	24,248	--	--	24	-114	2,771	1,830	1,665	3,704	6,925	589	6,854	--	--	--
Sapling & seedling	11,000	27	-37	428	969	4,818	2,062	1,804	929	--	--	--	--	--	--
All stands	84,312	27	-18	154	1,227	8,628	9,592	7,014	16,030	11,620	5,768	20,470	3,800	--	--
Nonstocked	16	--	--	16	--	--	--	--	--	--	--	--	--	--	--
All types															
Sawtimber	324,127	--	170	-127	4,049	3,515	15,004	15,601	57,584	53,059	34,395	83,469	51,914	7,013	-1,519
Poletimber	92,412	--	--	24	1	5,151	7,749	5,901	15,768	25,002	6,271	22,569	3,138	--	838
Sapling & seedling	20,591	27	1,689	2,619	957	6,025	4,066	3,308	1,546	354	--	--	--	--	--
Nonstocked	16	--	--	16	--	--	--	--	--	--	--	--	--	--	--
All stands	437,146	27	1,859	2,532	5,007	14,691	26,819	24,810	74,898	78,415	40,666	106,038	55,052	7,013	-681

[1/] International 1/4-inch rule.

Table 73.--Net annual growth of growing stock and sawtimber on timberland by county and species group, Illinois, 1984

County	GROWING STOCK					SAWTIMBER				
	All species	Species group				All species	Species group			
		Pine	Other softwoods	Soft hardwoods	Hard hardwoods		Pine	Other softwoods	Soft hardwoods	Hard hardwoods
				SOUTHERN UNIT						
	Thousand cubic feet					Thousand board feet[1]				
Alexander	1,353	37	29	421	866	5,592	99	26	1,513	3,954
Franklin	1,206	11	10	475	710	5,261	60	3	2,023	3,175
Gallatin	1,196	130	6	399	661	4,761	198	8	1,534	3,021
Hamilton	1,023	8	13	398	604	4,487	46	15	1,703	2,723
Hardin	1,711	299	10	510	892	6,348	418	24	1,797	4,109
Jackson	3,352	108	16	1,191	2,037	13,831	282	45	4,359	9,145
Johnson	2,067	151	17	725	1,174	8,391	225	12	2,987	5,167
Massac	905	54	3	341	507	3,644	118	3	1,238	2,285
Perry	1,323	17	30	535	741	5,240	55	12	1,935	3,238
Pope	4,045	924	27	1,129	1,965	14,659	2,012	53	3,520	9,074
Pulaski	797	6	23	321	447	3,210	27	2	1,238	1,943
Randolph	2,152	20	45	865	1,222	8,625	79	13	3,212	5,321
Saline	1,323	127	15	445	736	5,190	172	33	1,639	3,346
Union	2,236	68	48	792	1,328	9,077	181	23	2,899	5,974
White	975	12	4	391	568	4,246	46	-2	1,797	2,405
Williamson	2,080	43	16	841	1,180	8,234	104	34	3,004	5,092
Total	27,744	2,015	312	9,779	15,638	110,796	4,122	304	36,398	69,972
				CLAYPAN UNIT						
Bond	766	--	--	276	490	3,934	--	--	922	3,012
Calhoun	1,651	--	--	607	1,044	8,630	--	1	2,290	6,339
Clark	1,544	--	1	604	939	8,689	--	2	2,511	6,176
Clay	1,248	54	--	443	751	6,115	8	2	1,627	4,478
Clinton	1,078	17	1	432	628	5,759	3	1	1,720	4,035
Crawford	1,238	--	1	481	756	6,844	--	1	1,947	4,896
Cumberland	929	18	--	283	628	4,692	3	--	935	3,754
Edwards	429	--	--	160	269	2,275	--	--	563	1,712
Effingham	1,301	17	--	490	794	6,372	2	1	1,656	4,713
Fayette	2,237	17	--	688	1,532	10,467	3	--	2,029	8,435
Greene	1,280	--	1	493	786	6,677	--	1	1,825	4,851
Jasper	885	--	--	301	584	4,483	--	--	959	3,524
Jefferson	1,745	--	1	667	1,077	9,402	--	2	2,623	6,777
Jersey	1,460	--	1	553	906	8,003	--	1	2,208	5,794
Lawrence	810	19	--	302	489	3,859	3	--	960	2,896
Macoupin	2,100	--	1	792	1,307	10,341	--	2	2,760	7,579
Madison	1,353	--	--	520	833	7,437	--	1	2,077	5,359
Marion	1,657	--	1	637	1,019	9,113	--	2	2,551	6,560
Monroe	1,250	--	1	489	760	6,669	--	1	1,865	4,803
Montgomery	994	--	--	391	603	5,384	--	1	1,518	3,865
Richland	802	18	--	278	506	3,985	3	1	993	2,988
St. Clair	1,275	--	--	497	778	6,538	--	1	1,752	4,785
Shelby	1,374	--	1	539	834	7,694	--	2	2,225	5,467
Wabash	314	--	--	115	199	1,624	--	1	400	1,223
Washington	1,293	--	1	484	808	7,064	--	1	1,911	5,152
Wayne	1,595	17	1	603	974	7,404	3	1	2,107	5,293
Total	32,608	177	12	12,125	20,294	169,454	28	26	44,934	124,466

[1] International 1/4-inch rule.

(Table 73 continued on next page)

(Table 73 continued)

County	GROWING STOCK					SAWTIMBER				
	All species	Species group				All species	Species group			
		Pine	Other softwoods	Soft hardwoods	Hard hardwoods		Pine	Other softwoods	Soft hardwoods	Hard hardwoods
	PRAIRIE UNIT									
	Thousand cubic feet					Thousand board feet[1/]				
Adams	1,818	23	5	623	1,167	8,137	371	2	2,416	5,348
Boone	169	2	1	60	106	740	27	1	251	461
Brown	1,198	21	3	396	778	5,552	295	3	1,418	3,836
Bureau	826	12	2	284	528	3,449	174	2	853	2,420
Carroll	612	7	2	210	393	2,711	114	1	819	1,777
Cass	801	29	2	285	485	3,602	218	1	1,191	2,192
Champaign	144	1	1	51	91	585	21	1	195	368
Christian	414	6	2	146	260	1,907	89	2	603	1,213
Coles	589	10	1	193	385	2,713	143	2	673	1,895
Cook	46	3	--	14	29	179	10	--	57	112
De Kalb	88	1	--	29	58	376	14	--	106	256
De Witt	290	3	1	108	178	1,094	47	1	315	731
Douglas	150	3	--	48	99	703	37	1	177	488
Du Page	137	10	1	56	70	653	59	1	301	292
Edgar	532	9	1	163	359	2,478	132	1	558	1,787
Ford	41	--	--	13	28	168	4	--	46	118
Fulton	2,150	24	8	756	1,362	9,425	390	6	2,917	6,112
Grundy	351	6	1	127	217	1,518	75	1	454	988
Hancock	1,459	24	4	494	937	6,635	346	4	1,696	4,589
Henderson	745	25	2	269	449	3,449	218	1	1,149	2,081
Henry	456	7	1	156	292	2,029	100	2	528	1,399
Iroquois	359	3	3	137	216	1,450	38	4	501	907
Jo Daviess	1,439	16	5	496	922	6,353	266	3	1,937	4,147
Kane	344	11	2	120	211	1,453	75	2	449	927
Kankakee	319	8	1	126	184	1,288	70	1	465	752
Kendall	125	1	--	44	80	526	19	1	153	353
Knox	1,038	13	3	346	676	4,601	202	3	1,275	3,121
Lake	7	--	--	1	6	33	1	--	1	31
La Salle	688	11	2	234	441	3,097	147	1	916	2,033
Lee	258	5	1	91	161	1,182	58	1	413	710
Livingston	211	3	1	76	131	838	35	1	250	552
Logan	165	2	2	61	100	736	25	2	296	413
Macon	170	6	1	60	103	720	41	1	197	481
Marshall	501	6	2	174	319	2,190	92	1	668	1,429
Mason	915	46	2	318	549	4,232	305	1	1,346	2,580
McDonough	782	13	2	257	510	3,572	189	2	858	2,523
McHenry	376	3	3	130	240	1,623	57	2	515	1,049
McLean	305	3	2	117	183	1,114	40	1	369	704
Menard	416	4	2	155	255	1,757	63	3	565	1,126
Mercer	697	10	2	237	448	3,081	140	2	908	2,031
Morgan	780	9	6	296	469	3,429	128	7	1,257	2,037
Moultrie	221	2	3	99	117	928	28	3	449	448
Ogle	595	6	2	206	381	2,620	106	1	811	1,702
Peoria	1,231	15	4	424	788	5,458	239	2	1,630	3,587
Piatt	77	1	1	25	50	343	17	--	84	242
Pike	2,440	33	14	879	1,514	10,833	435	17	3,615	6,766
Putnam	337	4	1	116	216	1,484	65	--	442	977
Rock Island	891	13	3	306	569	3,992	184	1	1,214	2,593
Sangamon	589	8	2	192	387	2,665	123	1	720	1,821
Schuyler	1,651	15	8	596	1,032	6,977	231	11	2,185	4,550
Scott	531	9	2	181	339	2,382	122	2	613	1,645
Stark	97	1	--	33	63	417	17	--	115	285
Stephenson	333	4	1	111	217	1,474	61	1	430	982
Tazewell	555	9	2	188	356	2,482	121	1	733	1,627
Vermilion	716	12	2	248	454	3,007	139	2	830	2,036
Warren	465	7	1	154	303	2,054	91	1	546	1,416
Whiteside	363	6	1	125	231	1,619	77	1	494	1,047
Will	654	18	3	256	377	2,302	125	2	648	1,527
Winnebago	409	5	2	139	263	1,813	73	1	554	1,185
Woodford	597	7	2	208	380	2,668	114	1	850	1,703
Total	35,663	574	134	12,443	22,512	156,896	7,243	120	47,025	102,508
All counties	96,015	2,766	458	34,347	58,444	437,146	11,393	450	128,357	296,946

[1/] International 1/4-inch rule.

Table 74.--Timber removals from growing stock on timberland by species group and Forest Survey Unit, Illinois, 1984

(In thousand cubic feet)

Species group	All Units	Forest Survey Unit		
		Southern Unit	Claypan Unit	Prairie Unit
Softwoods				
Shortleaf pine	1,535	1,535	--	--
Other pine	103	4	--	99
Baldcypress	70	70	--	--
Eastern redcedar	131	50	5	76
Other softwoods	26	23	--	3
Total	1,865	1,682	5	178
Hardwoods				
Select white oak	12,611	3,050	2,487	7,074
Other white oak	2,317	411	1,873	33
Select red oak	4,600	1,013	1,026	2,561
Other red oak	17,772	7,548	6,643	3,581
Select hickory	3,395	1,267	1,352	776
Other hickory	2,102	785	832	485
Basswood	377	6	56	315
Beech	224	219	5	--
Hard maple	1,713	361	640	712
Soft maple	3,744	1,064	1,516	1,164
Elm	2,268	474	554	1,240
Ash	4,144	1,389	1,810	945
Sycamore	1,180	385	686	109
Cottonwood	3,580	877	1,308	1,395
Sweetgum	946	740	206	--
Tupelo	183	171	11	1
Black cherry	799	88	221	490
Black walnut	1,084	100	275	709
Yellow-poplar	833	606	166	61
Other hardwoods	2,869	516	932	1,421
Total	66,741	21,070	22,599	23,072
All species	68,606	22,752	22,604	23,250

Table 75.--Timber removals from sawtimber on timberland by species group and Forest Survey Unit, Illinois, 1984

(In thousand board feet)[1/]

Species group	All Units	Forest Survey Unit: Southern Unit	Claypan Unit	Prairie Unit
Softwoods				
Shortleaf pine	2,533	2,533	--	--
Other pine	413	31	2	380
Baldcypress	353	353	--	--
Eastern redcedar	228	119	13	96
Other softwoods	14	--	--	14
Total	3,541	3,036	15	490
Hardwoods				
Select white oak	66,194	15,815	12,198	38,181
Other white oak	11,514	1,983	9,426	105
Select red oak	21,412	4,999	4,070	12,343
Other red oak	85,322	36,779	33,415	15,128
Select hickory	13,205	5,558	5,362	2,285
Other hickory	6,875	2,192	3,032	1,651
Basswood	1,789	30	284	1,475
Beech	1,171	1,152	19	--
Hard maple	7,382	1,291	3,071	3,020
Soft maple	16,889	4,913	6,854	5,122
Elm	6,600	1,692	1,697	3,211
Ash	16,647	5,784	7,270	3,593
Sycamore	5,276	1,695	3,109	472
Cottonwood	19,243	5,010	7,390	6,843
Sweetgum	4,431	3,389	1,041	1
Tupelo	811	757	48	6
Black cherry	2,478	256	588	1,634
Black walnut	5,012	295	1,177	3,540
Yellow-poplar	4,265	3,070	871	324
Other hardwoods	8,693	1,490	2,863	4,340
Total	305,209	98,150	103,785	103,274
All species	308,750	101,186	103,800	103,764

[1/] International 1/4-inch rule.

Table 76.--Timber removals from growing stock and sawtimber on timberland by Forest Survey Unit and species group, Illinois, 1984

Forest Survey Unit	Growing stock: All species	Softwoods: Pine	Softwoods: Other	Hardwoods: Soft	Hardwoods: Hard	Sawtimber: All species	Softwoods: Pine	Softwoods: Other	Hardwoods: Soft	Hardwoods: Hard
	Thousand cubic feet					Thousand board feet[1/]				
Southern Unit	22,752	1,539	143	4,927	16,143	101,186	2,564	472	22,302	75,848
Claypan Unit	22,604	--	5	5,656	16,943	103,800	2	13	24,745	79,040
Prairie Unit	23,250	99	79	6,196	16,876	103,764	380	110	23,428	79,846
All Units	68,606	1,638	227	16,779	49,962	308,750	2,946	595	70,475	234,734

[1/] International 1/4-inch rule.

Table 77.--Timber removals from growing stock and sawtimber on timberland by species group, Illinois, 1961 and 1984

Species group	Growing stock		Sawtimber	
	1961	1984	1961	1984
	Thousand cubic feet		Thousand board feet[1/]	
Softwoods				
Pine	380	1,638	1,940	2,946
Baldcypress	69	70	290	353
Other softwoods	9	157	40	242
Total	458	1,865	2,270	3,541
Hardwoods				
Select white oak	6,438	12,611	39,760	66,194
Other white oak	393	2,317	2,140	11,514
Select red oak	1,421	4,600	8,640	21,412
Other red oak	5,519	17,772	32,380	85,322
Hickory	765	5,497	3,170	20,080
Basswood	829	377	4,330	1,789
Beech	32	224	200	1,171
Hard maple	393	1,713	2,410	7,382
Soft maple	4,143	3,744	24,000	16,889
Ash	541	4,144	3,050	16,647
Cottonwood	3,587	3,580	22,070	19,243
Sweetgum	412	946	2,590	4,431
Tupelo	47	183	290	811
Black walnut	662	1,084	4,320	5,012
Yellow-poplar	282	833	1,810	4,265
Other hardwoods	4,208	7,116	21,870	23,047
Total	29,672	66,741	173,030	305,209
All species	30,130	68,606	175,300	308,750

[1/] International 1/4-inch rule.

Table 78.--Timber removals from growing stock and sawtimber on timberland by item and species group, Illinois, 1984

Item	Growing stock						Sawtimber					
	All species	Softwoods	Oak	Hickory	Maple	Other hardwoods	All species	Softwoods	Oak	Hickory	Maple	Other hardwoods
	Thousand cubic feet						Thousand board feet[1]					
Roundwood products												
Saw logs	25,108	62	15,802	1,271	2,088	5,885	149,988	344	92,707	7,786	12,298	36,853
Pulpwood[2]	3,417	1,409	572	200	312	924	10,753	1,942	2,526	891	1,354	4,040
Fuelwood	6,881	8	3,320	854	315	2,384	21,403	26	9,977	2,669	1,028	7,703
Veneer logs	524	--	419	11	--	94	3,874	--	3,095	85	--	694
Posts	191	24	82	26	--	59	509	14	245	77	--	173
Other	627	--	241	29	--	357	2,644	--	778	140	--	1,726
Total	36,748	1,503	20,436	2,391	2,715	9,703	189,171	2,326	109,328	11,648	14,680	51,189
Logging residue	7,590	21	4,826	416	590	1,737	22,905	6	15,515	1,177	1,403	4,804
Other removals	24,268	341	12,038	2,690	2,152	7,047	96,674	1,209	59,599	7,255	8,188	20,423
All removals	68,606	1,865	37,300	5,497	5,457	18,487	308,750	3,541	184,442	20,080	24,271	76,416

[1] International 1/4-inch rule.

[2] Includes particleboard and waferboard bolts.

Table 79.--Net annual growth and removals of growing stock and sawtimber on timberland by species group, Illinois, 1984

Species group	Growing stock		Sawtimber	
	Growth	Removals	Growth	Removals
	Thousand cubic feet		Thousand board feet[1/]	
Softwoods				
Shortleaf pine	1,891	1,535	4,087	2,533
Other pine	765	103	7,200	413
Baldcypress	13	70	90	353
Eastern redcedar	445	131	360	228
Other softwoods	110	26	106	14
Total	3,224	1,865	11,843	3,541
Hardwoods				
Select white oak	14,409	12,611	80,721	66,194
Other white oak	666	2,317	4,512	11,514
Select red oak	5,459	4,600	26,641	21,412
Other red oak	12,893	17,772	77,010	85,322
Select hickory	3,773	3,395	15,208	13,205
Other hickory	3,670	2,102	15,502	6,875
Basswood	1,215	377	8,060	1,789
Beech	242	224	1,488	1,171
Hard maple	3,717	1,713	14,466	7,382
Soft maple	14,144	3,744	44,147	16,889
Elm	-5,106	2,268	-9,780	6,600
Ash	6,932	4,144	27,334	16,647
Sycamore	2,412	1,180	9,518	5,276
Cottonwood	1,976	3,580	11,237	19,243
Sweetgum	1,163	946	3,509	4,431
Tupelo	209	183	942	811
Black cherry	3,663	799	16,385	2,478
Black walnut	2,279	1,084	14,142	5,012
Yellow-poplar	1,609	833	8,435	4,265
Other hardwoods	17,466	2,869	55,826	8,693
Total	92,791	66,741	425,303	305,209
All species	96,015	68,606	437,146	308,750

[1/] International 1/4-inch rule.

Table 80.--Net annual growth and removals of growing stock on timberland by ownership class and species group, Illinois, 1984

(In thousand cubic feet)

Ownership class	Growth					Removals				
	All species	Softwoods		Hardwoods		All species	Softwoods		Hardwoods	
		Pine	Other	Soft	Hard		Pine	Other	Soft	Hard
National Forest	5,761	1,767	19	986	2,989	2,149	1,111	23	266	749
Miscellaneous federal	1,254	-7	--	885	376	24	--	--	22	2
State	731	80	-38	155	534	31	--	10	5	16
County and municipal	1,517	--	--	936	581	--	--	--	--	--
Forest industry	367	--	--	221	146	463	15	2	105	341
Farmer and other[1/]	86,385	926	477	31,164	53,818	65,939	512	192	16,381	48,854
All owners	96,015	2,766	458	34,347	58,444	68,606	1,638	227	16,779	49,962

[1/] Includes miscellaneous private-corporation and miscellaneous private-indivdual.

Table 81.--Net annual growth and removals of sawtimber on timberland by ownership class and species group, Illinois, 1984

(In thousand board feet)[1/]

Ownership class	Growth					Removals				
	All species	Softwoods		Hardwoods		All species	Softwoods		Hardwoods	
		Pine	Other	Soft	Hard		Pine	Other	Soft	Hard
National Forest	19,254	3,123	167	1,708	14,256	6,903	1,513	120	1,370	3,900
Miscellaneous federal	8,731	-116	--	2,821	6,026	129	--	--	122	7
State	4,080	403	-208	1,183	2,702	164	--	51	28	85
County and municipal	7,091	--	--	3,975	3,116	--	--	--	--	--
Forest industry	2,517	--	--	523	1,994	2,473	77	12	562	1,822
Farmer and other[2/]	395,473	7,983	491	118,147	268,852	299,081	1,356	412	68,393	228,920
All owners	437,146	11,393	450	128,357	296,946	308,750	2,946	595	70,475	234,734

[1/] International 1/4-inch rule.

[2/] Includes miscellaneous private-corporation and miscellaneous private-indivdual.

Table 82.--Annual mortality of growing stock on timberland by species group, Illinois, 1961 and 1984

(In thousand cubic feet)

Species group	1961 [1]	1984
Softwoods	31	906
Hardwoods	29,777	65,675
All species	29,808	66,581

[1] Figures have been adjusted from those published after the 1962 survey to conform to 1984 volumes because of changes in survey procedures.

Table 83.--Annual mortality of growing stock and sawtimber on timberland by species group, Illinois, 1984

Species group	Growing stock	Sawtimber
	Thousand cubic feet	Thousand board feet [1]
Softwoods		
Jack pine	2	--
Red pine	96	27
White pine	130	468
Loblolly pine	2	8
Shortleaf pine	448	1,168
Baldcypress	143	789
Eastern redcedar	69	257
Other softwoods	16	5
Total	906	2,722
Hardwoods		
Select white oak	3,897	15,771
Other white oak	1,546	6,032
Select red oak	3,433	15,753
Other red oak	9,593	39,793
Select hickory	2,990	10,623
Other hickory	2,288	6,596
Basswood	563	1,086
Beech	49	128
Hard maple	1,073	2,476
Soft maple	4,893	16,872
Elm	17,244	39,074
Black ash	135	580
White & green ash	2,426	5,791
Sycamore	2,114	9,461
Cottonwood	2,616	11,852
Willow	831	2,871
Hackberry	1,280	3,438
Bigtooth aspen	1	6
Quaking aspen	40	--
River birch	542	1,461
Sweetgum	666	2,228
Tupelo	446	1,545
Black cherry	1,428	1,451
Black walnut	1,216	2,285
Butternut	67	64
Yellow-poplar	580	2,412
Other hardwoods	3,718	4,501
Total	65,675	204,150
All species	66,581	206,872

[1] International 1/4-inch rule.

Table 84.--Annual mortality of growing stock on timberland by species group and cause of death, Illinois, 1984

(In thousand cubic feet)

Species group	All causes	Cause of death						
		Insects	Disease	Fire	Animals	Weather	Suppression	Unknown and other
Softwoods								
Jack pine	2	--	--	--	--	--	--	2
Red pine	96	--	--	--	--	--	--	96
White pine	130	130	--	--	--	--	--	--
Loblolly pine	2	--	--	--	--	--	--	2
Shortleaf pine	448	--	166	--	--	--	--	282
Baldcypress	143	--	--	--	--	--	--	143
Eastern redcedar	69	--	--	--	--	--	--	69
Other softwoods	16	--	--	--	--	--	--	16
Total	906	130	166	--	--	--	--	610
Hardwoods								
Select white oak	3,897	--	1,984	--	--	--	163	1,750
Other white oak	1,546	--	516	--	--	--	--	1,030
Select red oak	3,433	228	1,623	--	--	214	19	1,349
Other red oak	9,593	49	3,691	218	--	275	733	4,627
Select hickory	2,990	520	498	--	--	370	--	1,602
Other hickory	2,288	763	336	--	--	96	--	1,093
Basswood	563	--	--	--	--	--	--	563
Beech	49	--	--	--	--	--	--	49
Hard maple	1,073	--	557	--	--	--	--	516
Soft maple	4,893	--	1,706	--	--	1,516	--	1,671
Elm	17,244	132	9,703	--	--	--	683	6,726
Black ash	135	--	--	--	--	--	--	135
White & green ash	2,426	--	756	--	--	334	180	1,156
Sycamore	2,114	--	--	--	--	--	--	2,114
Cottonwood	2,616	--	1,252	--	--	1,364	--	--
Willow	831	--	233	--	--	425	--	173
Hackberry	1,280	--	--	--	--	--	--	1,280
Bigtooth aspen	1	--	--	--	--	--	--	1
Quaking aspen	40	--	--	--	--	--	--	40
River birch	542	--	--	--	--	108	--	434
Sweetgum	666	--	--	--	--	--	--	666
Tupelo	446	--	231	--	--	--	--	215
Black cherry	1,428	--	1,057	--	--	--	371	--
Black walnut	1,216	--	817	--	--	--	399	--
Butternut	67	--	--	--	--	--	--	67
Yellow-poplar	580	--	--	--	--	--	--	580
Other hardwoods	3,718	--	--	--	--	--	2,039	1,679
Total	65,675	1,692	24,960	218	--	4,702	4,587	29,516
All species	66,581	1,822	25,126	218	--	4,702	4,587	30,126

Table 85.--Annual mortality of sawtimber on timberland by species group and cause of death, Illinois, 1984

(In thousand board feet)[1/]

Species group	All causes	Cause of death						
		Insects	Disease	Fire	Animals	Weather	Suppression	Unknown and other
Softwoods								
Jack pine	--	--	--	--	--	--	--	--
Red pine	27	--	--	--	--	--	--	27
White pine	468	468	--	--	--	--	--	--
Loblolly pine	8	--	--	--	--	--	--	8
Shortleaf pine	1,168	--	666	--	--	--	--	502
Baldcypress	789	--	--	--	--	--	--	789
Eastern redcedar	257	--	--	--	--	--	--	257
Other softwoods	5	--	--	--	--	--	--	5
Total	2,722	468	666	--	--	--	--	1,588
Hardwoods								
Select white oak	15,771	--	9,762	--	--	--	--	6,009
Other white oak	6,032	--	2,371	--	--	--	--	3,661
Select red oak	15,753	705	6,674	--	--	1,337	--	7,037
Other red oak	39,793	314	13,628	903	--	1,773	942	22,233
Select hickory	10,623	2,243	2,188	--	--	1,602	--	4,590
Other hickory	6,596	3,419	1,396	--	--	643	--	1,138
Basswood	1,086	--	--	--	--	--	--	1,086
Beech	128	--	--	--	--	--	--	128
Hard maple	2,476	--	1,525	--	--	--	--	951
Soft maple	16,872	--	16,872	--	--	--	--	--
Elm	39,074	--	22,977	--	--	--	--	16,097
Black ash	580	--	--	--	--	--	--	580
White & green ash	5,791	--	1,314	--	--	1,291	--	3,186
Sycamore	9,461	--	--	--	--	--	--	9,461
Cottonwood	11,852	--	5,722	--	--	6,130	--	--
Willow	2,871	--	--	--	--	2,036	--	835
Hackberry	3,438	--	--	--	--	--	--	3,438
Bigtooth aspen	6	--	--	--	--	--	--	6
Quaking aspen	--	--	--	--	--	--	--	--
River birch	1,461	--	--	--	--	--	--	1,461
Sweetgum	2,228	--	--	--	--	--	--	2,228
Tupelo	1,545	--	809	--	--	--	--	736
Black cherry	1,451	--	--	--	--	--	--	1,451
Black walnut	2,285	--	--	--	--	--	--	2,285
Butternut	64	--	--	--	--	--	--	64
Yellow-poplar	2,412	--	--	--	--	--	--	2,412
Other hardwoods	4,501	--	--	--	--	--	4,501	--
Total	204,150	6,681	85,238	903	--	14,812	5,443	91,073
All species	206,872	7,149	85,904	903	--	14,812	5,443	92,661

[1/] International 1/4-inch rule.

Table 86.--Annual mortality of growing stock and sawtimber on timberland by ownership class and species group, Illinois, 1984

Ownership class	Growing stock			Sawtimber		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
	Thousand cubic feet			Thousand board feet[1/]		
National Forest	3,538	290	3,248	11,992	533	11,459
Miscellaneous federal	2,156	84	2,072	7,775	447	7,328
State	1,166	208	958	4,686	1,075	3,611
County and municipal	1,069	--	1,069	3,410	--	3,410
Forest industry	134	--	134	538	--	538
Farmer	29,235	174	29,061	90,829	282	90,547
Misc. private-corp.	4,503	86	4,417	11,797	202	11,595
Misc. private-indiv.	24,780	64	24,716	75,845	183	75,662
All owners	66,581	906	65,675	206,872	2,722	204,150

[1/] International 1/4-inch rule.

Table 87.--Output of timber products by product, softwoods and hardwoods, and source of material, Illinois, 1983

Product	Standard units	Total		Roundwood products				Plant byproducts	
				Growing stock		Non-growing stock			
		No. of units	Thousand cubic feet	No. of units	Thousand cubic feet	No. of units	Thousand cubic feet	No. of units	Thousand cubic feet
Saw logs									
Softwoods	Thousand[1] board feet	344	62	344	62	--	--	--	--
Hardwoods		160,199	26,570	151,010	25,046	9,189	1,524	--	--
Total		160,543	26,632	151,354	25,108	9,189	1,524	--	--
Pulpwood[2]									
Softwoods	Standard[3] cords	21,596	1,703	17,871	1,409	330	26	3,395	268
Hardwoods		69,330	5,436	25,761	2,008	13,060	1,018	30,509	2,410
Total		90,926	7,139	43,632	3,417	13,390	1,044	33,904	2,678
Fuelwood									
Softwoods	Standard[3] cords	7,080	496	116	8	6,893	483	71	5
Hardwoods		1,683,210	117,594	99,632	6,873	1,526,607	106,733	56,971	3,988
Total		1,690,290	118,090	99,748	6,881	1,533,500	107,216	57,042	3,993
Veneer logs									
Softwoods	Thousand[1] board feet	--	--	--	--	--	--	--	--
Hardwoods		3,970	532	3,910	524	60	8	--	--
Total		3,970	532	3,910	524	60	8	--	--
Posts									
Softwoods	Thousand pieces	47	36	31	24	16	12	--	--
Hardwoods		1,238	707	292	167	946	540	--	--
Total		1,285	743	323	191	962	552	--	--
Other[4]									
Softwoods	Thousand cubic feet	10	10	--	--	--	--	10	10
Hardwoods		3,174	3,174	627	627	98	98	2,449	2,449
Total		3,184	3,184	627	627	98	98	2,459	2,459
All products									
Softwoods	Thousand cubic feet	--	2,307	--	1,503	--	521	--	283
Hardwoods		--	154,013	--	35,245	--	109,921	--	8,847
Total		--	156,320	--	36,748	--	110,442	--	9,130

[1] International 1/4-inch rule.

[2] Includes roundwood and plant byproducts used for particleboard and waferboard.

[3] 128 cubic feet; includes wood, bark, and air space.

[4] Other (industrial production) includes cabin logs, charcoal wood, shingle bolts, pilings, etc.

Table 88.--Output of roundwood products by product, softwoods and hardwoods, and source of material, Illinois, 1983

(In thousand cubic feet)

Product and species group	All sources	Growing-stock trees			Rough and rotten trees	Salvable dead trees	Other sources
		Total	Sawtimber	Poletimber			
Industrial products							
Saw logs							
Softwoods	62	62	62	--	--	--	--
Hardwoods	26,570	25,046	25,046	--	90	439	995
Subtotal	26,632	25,108	25,108	--	90	439	995
Veneer logs and bolts							
Softwoods	---	--	--	--	--	--	--
Hardwoods	532	524	524	--	--	--	8
Subtotal	532	524	524	--	--	--	8
Pulpwood[1/]							
Softwoods	1,435	1,409	372	1,037	26	--	--
Hardwoods	3,026	2,008	1,900	108	485	10	523
Subtotal	4,461	3,417	2,272	1,145	511	10	523
Cooperage							
Softwoods	--	--	--	--	--	--	--
Hardwoods	107	102	102	--	5	--	--
Subtotal	107	102	102	--	5	--	--
Piling							
Softwoods	--	--	--	--	--	--	--
Hardwoods	5	5	5	--	--	--	--
Subtotal	5	5	5	--	--	--	--
Mine timbers (Round)							
Softwoods	--	--	--	--	--	--	--
Hardwoods	185	136	24	112	19	--	30
Subtotal	185	136	24	112	19	--	30
Posts (Round and split)							
Softwoods	36	24	8	16	--	2	10
Hardwoods	707	167	120	47	34	1	505
Subtotal	743	191	128	63	34	3	515
Other							
Softwoods	--	--	--	--	--	--	--
Hardwoods	428	384	300	84	44	--	--
Subtotal	428	384	300	84	44	--	--
All industrial products							
Softwoods	1,533	1,495	442	1,053	26	2	10
Hardwoods	31,560	28,372	28,021	351	677	450	2,061
Total	33,093	29,867	28,463	1,404	703	452	2,071
Fuelwood							
Softwoods	491	8	5	3	2	94	387
Hardwoods	113,606	6,873	4,126	2,747	1,389	34,947	70,397
Total	114,097	6,881	4,131	2,750	1,391	35,041	70,784
All products							
Softwoods	2,024	1,503	447	1,056	28	96	397
Hardwoods	145,166	35,245	32,147	3,098	2,066	35,397	72,458
Total	147,190	36,748	32,594	4,154	2,094	35,493	72,855

[1/] Includes particleboard and waferboard bolts.

Table 89.--Timber products from roundwood by species group and product, Illinois, 1983

Species group	All products	Saw logs		Pulpwood[1]		Fuelwood	
	Thousand cubic feet	Thousand board feet[2]	Thousand cubic feet	Standard cords[3]	Thousand cubic feet	Standard cords[3]	Thousand cubic feet
Softwoods							
Shortleaf pine	1,414	--	--	17,899	1,412	33	2
Other pine	430	117	21	302	23	5,521	386
Baldcypress	34	192	34	--	--	--	--
Eastern redcedar	143	21	4	--	--	1,455	103
Other softwoods	3	14	3	--	--	--	--
Total	2,024	344	62	18,201	1,435	7,009	491
Hardwoods							
Select white oak	34,535	21,420	3,617	4,264	334	430,583	30,116
Other white oak	8,863	5,496	928	1,094	86	110,486	7,728
Select red oak	6,702	13,730	2,321	1,076	84	60,775	4,251
Other red oak	29,170	59,773	10,105	4,683	364	264,574	18,504
Select hickory	7,414	5,469	884	2,638	199	90,190	6,278
Other hickory	3,663	2,701	437	1,303	98	44,543	3,101
Basswood	168	645	101	--	--	963	67
Beech	108	674	108	--	--	--	--
Hard maple	2,075	3,261	547	832	60	21,284	1,468
Soft maple	11,870	9,678	1,641	5,135	410	140,541	9,819
Elm	8,807	2,584	412	1,138	90	118,787	8,304
Ash	6,603	7,280	1,178	3,296	256	68,534	4,766
Sycamore	1,365	2,998	481	2,079	162	10,325	722
Cottonwood	5,072	13,726	2,118	8,982	705	32,179	2,248
Sweetgum	622	2,946	481	1,758	135	88	6
Tupelo	102	415	66	416	33	48	3
Black cherry	2,280	868	130	--	--	30,851	2,150
Black walnut	1,963	2,954	439	--	--	20,464	1,422
Yellow-poplar	442	2,649	430	127	10	22	2
Other hardwoods	13,342	932	146	--	--	181,002	12,651
Total	145,166	160,199	26,570	38,821	3,026	1,626,239	113,606
All species	147,190	160,543	26,632	57,022	4,461	1,633,248	114,097

(Table 89 continued on next page)

[1] Includes particleboard and waferboard bolts.

[2] International 1/4-inch rule.

[3] 128 cubic feet; includes wood, bark, and air space.

(Table 89 continued)

Species group	Veneer logs		Posts		Other products
	Thousand board feet[2/]	Thousand cubic feet	Thousand pieces	Thousand cubic feet	Thousand cubic feet
Softwoods					
Shortleaf pine	--	--	--	--	--
Other pine	--	--	--	--	--
Baldcypress	--	--	--	--	--
Eastern redcedar	--	--	47	36	--
Other softwoods	--	--	--	--	--
Total	--	--	47	36	--
Hardwoods					
Select white oak	2,033	275	112	61	132
Other white oak	522	71	29	16	34
Select red oak	101	14	13	8	24
Other red oak	439	59	59	33	105
Select hickory	57	7	45	27	19
Other hickory	28	4	22	13	10
Basswood	--	--	--	--	--
Beech	--	--	--	--	--
Hard maple	--	--	--	--	--
Soft maple	--	--	--	--	--
Elm	3	4/	2	1	--
Ash	18	2	--	--	401
Sycamore	--	--	--	--	--
Cottonwood	7	1	--	--	--
Sweetgum	--	--	--	--	--
Tupelo	--	--	--	--	--
Black cherry	--	--	--	--	--
Black walnut	760	99	6	3	--
Yellow-poplar	2	4/	--	--	--
Other hardwoods	--	--	950	545	--
Total	3,970	532	1,238	707	725
All species	3,970	532	1,285	743	725

[2/] International 1/4-inch rule.

[4/] Less than 500 cubic feet.

Table 90.--Volume of primary plant residue by use and type of residue, Illinois, 1983

(In thousand cubic feet)

Use	Wood residue							
	Total		Coarse[1/]		Fine[2/]		Bark[3/]	
	Softwoods	Hardwoods	Softwoods	Hardwoods	Softwoods	Hardwoods	Softwoods	Hardwoods
Fiber products[4/]	--	3,594.2	--	3,590.0	--	4.2	--	4.7
Charcoal	--	--	--	--	--	--	--	--
Industrial fuel	1.0	1,267.1	0.8	109.5	0.2	1,157.6	0.4	1,058.1
Domestic fuel	4.2	2,721.2	4.2	2,576.4	--	144.8	2.6	1,395.5
Miscellaneous[5/]	9.6	2,448.9	--	30.5	9.6	2,418.4	6.1	1,700.9
Not used[6/]	12.2	1,463.3	11.8	877.3	0.4	586.0	1.7	464.0
Total	27.0	11,494.7	16.8	7,183.7	10.2	4,311.0	10.8	4,623.2

[1/] Suitable for chipping such as slabs, edgings, veneer cores, etc.

[2/] Not suitable for chipping such as sawdust, veneer clippings, etc.

[3/] Does not include bark disposal at pulpmills.

[4/] For manufacture of pulp, hardboard, or roofing felt.

[5/] Livestock bedding, mulch, small dimension, and specialty items.

[6/] Includes residue burned as waste.

Table 91.--All live shrub[1/] biomass yields on timberland by shrub species group and forest type, Illinois, 1985

(In pounds per acre green weight)

Species group	Forest type					
	Pine	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Maple-beech
Tall shrubs						
Eastern redcedar	--	--	70	--	5	7
Select white oak	71	--	61	--	1	1
Other white oak	--	--	4	--	--	3
Select red oak	--	7	63	--	--	--
Other red oak	95	434	1,780	7	--	16
Select hickory	1	--	23	1	--	39
Other hickory	23	89	61	--	56	2
Basswood	--	232	1	--	--	--
Beech	--	--	52	494	--	--
Hard maple	--	1	127	231	21	64
Soft maple	72	--	7	--	631	52
Elm	104	530	482	13	51	54
Black ash	--	--	--	--	--	15
White & green ash	116	31	153	--	236	88
Sycamore	--	--	--	--	--	--
Cottonwood	--	--	--	--	--	--
Hackberry	--	152	9	--	102	56
River birch	--	--	--	1	--	--
Sweetgum	--	--	2	--	--	--
Tupelo	--	--	584	22	--	159
Black cherry	11	4	62	--	9	6
Black walnut	1	--	1	--	--	--
Butternut	1	--	--	--	--	--
Yellow-poplar	254	--	1	--	--	13
Persimmon	67	1	3	--	1	1
Sassafras	292	159	200	2	19	1,313
Other hardwoods	32	217	151	20	19	312
Eastern redbud	--	4	8	--	--	--
Osage-orange	--	--	25	--	--	50
Apple	--	--	--	--	--	4
Eastern hophornbeam	--	--	292	--	--	4
Chokecherry	--	--	--	--	--	--
Wild plum	--	--	--	--	--	6
Dogwood	1	49	169	--	--	192
Pawpaw	--	--	92	--	--	2
Witch hazel	--	--	--	--	--	--
Juneberry	--	--	1	--	--	--
Hazel	--	--	52	--	--	--
Prickly ash	1	--	2	--	--	13
Alder buckthorn	--	--	2	--	--	1
Viburnum	--	--	2	--	--	1
Elder	1,396	--	--	--	22	--
Sumac	24	--	67	--	20	75
Shrubby willows	--	--	--	--	61	--
Hydrangea	--	--	4	--	--	--
Spicebush	--	--	7	10	4	--
Miscellaneous tall shrubs	--	1	14	--	379	147
Total tall shrubs	2,562	1,911	4,634	801	1,637	2,696
Low shrubs						
Virginia creeper	63	122	112	129	47	96
Gooseberry-currant	--	8	8	--	3	29
Raspberry-blackberry	190	--	15	18	14	45
Rose	--	--	22	--	6	77
American bladdernut	--	--	--	--	--	--
Bilberry-blueberry	--	--	6	--	--	--
Honeysuckle	988	411	142	293	146	118
Snowberry	1	6	1	--	1	2
Poison ivy	163	277	199	431	112	181
Greenbriar	38	11	18	--	10	13
Grape	4	7	16	--	91	13
Cane	--	--	--	--	--	--
Miscellaneous low shrubs	119	--	4	173	8	24
Total low shrubs	1,566	842	543	1,044	438	598
All shrubs	4,128	2,753	5,177	1,845	2,075	3,294
Number of plots[2/]	7	4	96	4	27	39

[1/] Trees under 1.0-inch d.b.h. are also included.
[2/] Number of plots by forest type from which average yields were arrived.

Table 92.--All live above-ground tree biomass yields on timberland by species group and forest type, Illinois, 1985

(In pounds per acre)

Species group	Forest type								
	White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
Softwoods									
Jack pine	3,493	--	--	2	--	--	--	--	--
Red pine	42,606	--	2,308	12	--	--	--	--	--
White pine	59,156	--	--	42	--	--	--	35	--
Loblolly pine	--	--	--	24	--	--	--	--	--
Shortleaf pine	2,490	106,306	32,710	37	--	15	229	--	--
Baldcypress	--	--	--	--	3,840	--	--	181	--
Eastern redcedar	--	640	17,465	429	12	37	--	549	--
Other softwoods	--	--	15,443	22	--	--	--	29	--
Total	107,745	106,946	67,926	568	3,852	52	229	794	--
Hardwoods									
Select white oak	2,716	--	8,134	39,081	13,888	3,742	--	11,819	4,236
Other white oak	--	4,246	2,351	6,570	1,834	901	--	511	--
Select red oak	--	--	1,269	13,240	5,431	2,152	748	6,016	2,306
Other red oak	1,509	8,468	4,210	31,664	69,890	7,590	857	9,790	--
Select hickory	--	1,004	--	13,102	9,095	3,881	--	4,641	--
Other hickory	29	914	5,075	10,068	2,534	1,943	--	3,629	--
Basswood	--	--	38	849	--	468	--	2,608	--
Beech	--	51	38	412	187	101	--	910	--
Hard maple	--	1,612	48	4,813	200	1,553	--	12,165	--
Soft maple	--	4,111	445	980	4,751	45,675	32,136	3,113	8,191
Elm	2,619	7,986	10,300	8,085	9,841	11,725	8,475	14,660	1,979
Black ash	--	--	--	69	175	857	--	44	--
White & green ash	--	119	3,649	4,804	10,835	12,395	513	8,194	7,128
Sycamore	--	--	875	1,304	2,639	10,958	344	2,185	--
Cottonwood	--	--	823	899	1,618	9,575	105,391	1,834	758
Willow	--	--	1,037	207	2,875	7,469	2,238	186	--
Hackberry	--	20	403	1,195	1,533	9,150	22	2,519	885
Bigtooth aspen	--	--	--	--	--	--	--	26	--
Quaking aspen	--	--	--	1	--	--	--	182	--
River birch	--	--	752	104	875	4,554	--	573	--
Sweetgum	--	536	6,309	514	15,196	1,835	--	552	--
Tupelo	--	--	257	810	8,529	98	--	313	--
Black cherry	939	1,394	526	2,369	2,249	907	771	5,213	22
Black walnut	285	1,464	1,745	2,835	212	2,731	4,083	5,463	--
Butternut	--	--	--	23	141	173	--	323	--
Yellow-poplar	--	2,662	1,846	539	1,710	804	--	2,683	--
Other hardwoods	7,592	10,068	5,165	6,484	6,277	14,160	8,932	10,182	16,113
Noncommercial species	89	23	446	3,525	1,158	2,671	1,096	4,579	6,059
Total	15,778	44,678	55,741	154,546	173,673	158,068	165,606	114,913	47,677
All species	123,523	151,624	123,667	155,114	177,525	158,120	165,835	115,707	47,677

Table 93.--All live above-ground tree biomass on timberland by species group and forest type, Illinois, 1985

(In green tons)

Species group	All types	Forest type								
		White pine	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-soft maple	Cotton-wood	Maple-beech	Non-stocked
Softwoods										
Jack pine	37,031	35,284	--	--	1,747	--	--	--	--	--
Red pine	457,730	430,316	--	15,346	12,068	--	--	--	--	--
White pine	658,328	597,479	--	--	42,767	--	--	--	18,082	--
Loblolly pine	24,436	--	--	--	24,436	--	--	--	--	--
Shortleaf pine	2,707,925	25,154	2,418,455	217,519	37,680	--	5,082	3,976	59	--
Baldcypress	359,337	--	--	--	--	264,570	--	--	94,767	--
Eastern redcedar	866,060	--	14,557	116,139	434,775	856	12,731	--	287,002	--
Other softwoods	139,736	--	--	102,699	21,796	--	--	--	15,241	--
Total	5,250,583	1,088,233	2,433,012	451,703	575,269	265,426	17,813	3,976	415,151	--
Hardwoods										
Select white oak	48,119,257	27,429	--	54,091	39,569,213	956,891	1,283,114	--	6,183,828	44,691
Other white oak	7,467,325	--	96,607	15,637	6,652,421	126,339	308,794	--	267,527	--
Select red oak	17,710,832	--	--	8,441	13,405,580	374,169	737,926	13,013	3,147,378	24,325
Other red oak	44,850,520	15,245	192,646	27,999	32,059,756	4,815,388	2,602,636	14,914	5,121,936	--
Select hickory	17,674,042	--	22,850	--	13,265,899	626,618	1,330,654	--	2,428,021	--
Other hickory	12,988,247	296	20,797	33,749	10,193,744	174,600	666,264	--	1,898,797	--
Basswood	2,384,829	--	--	252	859,589	--	160,516	--	1,364,472	--
Beech	942,568	--	1,158	253	417,405	12,852	34,750	--	476,150	--
Hard maple	11,820,811	--	36,678	320	4,872,900	13,789	532,570	--	6,364,554	--
Soft maple	19,352,399	--	93,521	2,961	992,272	327,317	15,661,987	559,164	1,628,757	86,420
Elm	20,999,666	26,447	181,688	68,498	8,185,899	678,053	4,020,566	147,473	7,670,164	20,878
Black ash	398,424	--	--	--	69,668	12,048	293,729	--	22,979	--
White & green ash	14,258,477	--	2,701	24,268	4,863,653	746,548	4,250,303	8,926	4,286,873	75,205
Sycamore	6,414,561	--	--	5,817	1,320,257	181,831	3,757,638	5,981	1,143,037	--
Cottonwood	7,111,554	--	--	5,475	910,177	111,470	3,283,259	1,833,799	959,382	7,992
Willow	3,112,070	--	--	6,894	209,453	198,100	2,561,144	38,944	97,535	--
Hackberry	5,783,478	--	444	2,680	1,209,811	105,634	3,137,443	386	1,317,740	9,340
Bigtooth aspen	13,711	--	--	--	--	--	--	--	13,711	--
Quaking aspen	96,201	--	--	--	1,127	--	--	--	95,074	--
River birch	2,032,246	--	--	5,004	105,426	60,294	1,561,737	--	299,785	--
Sweetgum	2,539,568	--	12,203	41,954	520,053	1,047,036	629,323	--	288,999	--
Tupelo	1,606,826	--	--	1,708	820,033	587,617	33,750	--	163,718	--
Black cherry	5,650,569	9,488	31,712	3,497	2,398,862	154,926	311,034	13,407	2,727,408	235
Black walnut	6,798,329	2,876	33,301	11,606	2,870,315	14,589	936,383	71,041	2,858,218	--
Butternut	261,639	--	--	--	23,288	9,691	59,434	--	169,226	--
Yellow-poplar	2,415,934	--	60,570	12,277	545,900	117,851	275,698	--	1,403,638	--
Other hardwoods	17,845,753	76,681	229,052	34,350	6,565,059	432,477	4,855,419	155,411	5,327,310	169,994
Noncommercial sp.	7,047,806	896	534	2,963	3,569,273	79,793	915,810	19,074	2,395,537	63,926
Total	287,697,642	159,358	1,016,462	370,694	156,477,033	11,965,921	54,201,881	2,881,533	60,121,754	503,006
All species	292,948,225	1,247,591	3,449,474	822,397	157,052,302	12,231,347	54,219,694	2,885,509	60,536,905	503,006

Table 94.--All live above-ground tree biomass on timberland by species group and tree biomass component, Illinois, 1985

(In green tons)

Species group	All components	Biomass component						
		All live 1- to 5-inch trees	Growing-stock trees			Cull trees		
			Stumps	Boles	Tops and limbs	Stumps	Boles	Tops and limbs
Softwoods								
Jack pine	37,031	9,982	2,076	19,004	2,668	259	2,695	347
Red pine	457,730	38,329	31,208	324,688	42,039	1,640	17,585	2,241
White pine	658,328	98,958	36,541	449,284	52,115	1,897	17,317	2,216
Loblolly pine	24,436	464	1,526	20,094	2,352	--	--	--
Shortleaf pine	2,707,925	205,466	146,458	2,078,649	256,707	1,279	17,204	2,162
Baldcypress	359,337	--	11,079	294,182	54,076	--	--	--
Eastern redcedar	866,060	351,156	24,720	274,722	86,354	7,068	94,492	27,548
Other softwoods	139,736	14,931	5,858	74,837	23,865	965	15,035	4,245
Total	5,250,583	719,286	259,466	3,535,460	520,176	13,108	164,328	38,759
Hardwoods								
Select white oak	48,119,257	998,593	2,359,614	31,649,299	8,477,821	254,974	3,541,019	837,937
Other white oak	7,467,325	229,478	402,799	4,782,836	1,425,959	35,110	468,668	122,475
Select red oak	17,710,832	209,826	807,157	12,042,960	3,145,741	71,435	1,165,668	268,045
Other red oak	44,850,520	1,508,497	2,072,297	28,945,286	8,101,068	217,552	3,172,328	833,492
Select hickory	17,674,042	1,291,856	838,806	10,994,130	3,431,619	60,776	813,001	243,854
Other hickory	12,988,247	1,402,865	630,521	7,861,755	2,550,686	32,894	382,605	126,921
Basswood	2,384,829	270,837	110,894	1,379,723	401,688	13,454	162,084	46,149
Beech	942,568	56,181	28,519	400,450	101,112	19,352	269,412	67,542
Hard maple	11,820,811	1,515,718	438,102	5,966,519	1,826,101	102,817	1,556,334	415,220
Soft maple	19,352,399	1,330,155	712,865	11,029,983	3,201,170	143,100	2,319,080	616,046
Elm	20,999,666	5,609,175	894,431	8,682,723	3,030,837	194,250	1,929,258	658,992
Black ash	398,424	34,338	22,839	255,481	72,370	862	9,735	2,799
White & green ash	14,258,477	1,673,119	626,259	7,791,781	2,460,613	94,593	1,243,402	368,710
Sycamore	6,414,561	60,650	254,363	4,402,211	1,138,088	23,480	435,679	100,090
Cottonwood	7,111,554	177,765	365,557	4,859,517	1,209,324	27,217	394,068	78,106
Willow	3,112,070	187,849	125,470	1,448,335	441,175	57,304	665,267	186,670
Hackberry	5,783,478	967,273	296,878	2,912,553	900,178	50,765	505,276	150,555
Bigtooth aspen	13,711	--	535	10,895	2,281	--	--	--
Quaking aspen	96,201	30,496	3,579	48,469	13,657	--	--	--
River birch	2,032,246	148,470	88,585	1,208,533	389,455	11,230	140,669	45,304
Sweetgum	2,539,568	175,767	131,402	1,620,741	493,457	6,626	87,183	24,392
Tupelo	1,606,826	168,030	78,185	975,221	290,677	5,840	68,896	19,977
Black cherry	5,650,569	1,023,668	192,917	2,461,166	798,153	68,327	832,976	273,362
Black walnut	6,798,329	385,393	302,744	3,811,370	1,214,271	60,851	785,466	238,234
Butternut	261,639	13,968	12,278	152,288	50,414	1,732	23,877	7,082
Yellow-poplar	2,415,934	114,772	111,227	1,620,515	451,576	7,181	83,456	27,207
Other hardwoods	17,845,753	5,010,212	529,956	5,596,174	1,846,839	310,937	3,462,176	1,089,459
Noncommercial spp.	7,047,806	3,320,359	--	--	--	273,679	2,561,144	892,624
Total	287,697,642	27,915,310	12,438,779	162,910,914	47,466,330	2,146,338	27,078,727	7,741,244
All species	292,948,225	28,634,596	12,698,245	166,446,374	47,986,506	2,159,446	27,243,055	7,780,003

Table 95.--All live above-ground tree biomass on timberland by species group and tree biomass component, Illinois, 1985

(In thousand cubic feet)

Species group	All components	All live 1- to 5-inch trees	Biomass component: Growing-stock trees: Stumps	Growing-stock trees: Boles	Growing-stock trees: Tops and limbs	Cull trees: Stumps	Cull trees: Boles	Cull trees: Tops and limbs
Softwoods								
Jack pine	1,613	435	91	827	116	12	117	15
Red pine	19,856	1,714	1,349	14,043	1,820	72	761	97
White pine	29,178	4,429	1,625	19,873	2,302	85	766	98
Loblolly pine	878	17	53	723	85	--	--	--
Shortleaf pine	97,467	7,532	5,266	74,711	9,216	47	618	77
Baldcypress	12,661	--	392	10,363	1,906	--	--	--
Eastern redcedar	40,640	16,508	1,155	12,873	4,053	331	4,430	1,290
Other softwoods	6,383	682	273	3,417	1,086	46	686	193
Total	208,676	31,317	10,204	136,830	20,584	593	7,378	1,770
Hardwoods								
Select white oak	1,656,867	34,391	81,215	1,089,758	291,942	8,771	121,924	28,866
Other white oak	257,140	7,906	13,875	164,681	49,111	1,209	16,140	4,218
Select red oak	550,449	6,526	25,094	374,279	97,766	2,225	36,228	8,331
Other red oak	1,392,184	46,874	64,333	898,429	251,460	6,749	98,476	25,863
Select hickory	557,419	40,831	26,443	346,694	108,207	1,922	25,637	7,685
Other hickory	440,273	47,542	21,382	266,499	86,463	1,118	12,968	4,301
Basswood	113,173	12,995	5,259	65,378	19,033	641	7,678	2,189
Beech	31,917	1,902	965	13,562	3,425	657	9,119	2,287
Hard maple	376,541	48,275	13,962	190,047	58,178	3,281	49,575	13,223
Soft maple	699,584	48,025	25,795	398,749	115,728	5,171	83,843	22,273
Elm	771,675	212,517	32,530	315,429	110,107	7,072	70,077	23,943
Black ash	15,938	1,374	909	10,221	2,898	35	389	112
White & green ash	558,279	67,053	24,420	304,133	96,060	3,681	48,537	14,395
Sycamore	221,771	2,101	8,795	152,187	39,352	815	15,063	3,458
Cottonwood	277,956	6,963	14,283	189,926	47,266	1,066	15,399	3,053
Willow	130,287	7,918	5,245	60,612	18,463	2,393	27,839	7,817
Hackberry	221,890	37,106	11,392	111,740	34,542	1,944	19,391	5,775
Bigtooth aspen	547	--	21	435	91	--	--	--
Quaking aspen	3,850	1,229	142	1,934	545	--	--	--
River birch	74,508	5,444	3,244	44,309	14,281	413	5,158	1,659
Sweetgum	84,470	5,849	4,365	53,913	16,411	220	2,900	812
Tupelo	55,415	5,797	2,701	33,629	10,022	200	2,376	690
Black cherry	229,712	41,561	7,848	100,085	32,454	2,776	33,870	11,118
Black walnut	254,368	15,114	11,309	142,185	45,301	2,269	29,306	8,884
Butternut	11,685	623	547	6,802	2,253	76	1,067	317
Yellow-poplar	92,694	4,400	4,280	62,176	17,317	277	3,201	1,043
Other hardwoods	773,668	217,194	22,980	242,625	80,056	13,476	150,098	47,239
Noncommercial spp.	281,858	132,761	--	--	--	10,954	102,434	35,709
Total	10,136,118	1,060,271	433,334	5,640,417	1,648,732	79,411	988,693	285,260
All species	10,344,794	1,091,588	443,538	5,777,247	1,669,316	80,004	996,071	287,030

Table 96.--Removals,[1] net annual growth, and inventory of growing stock on timberland, Illinois, 1985, and low removals option projections[2] to 2015

(In million cubic feet)

Year	All species		
	Removals	Growth	Inventory
1985	69.2	95.8	4,835.1
1995	74.7	93.7	5,063.1
2005	78.1	92.0	5,228.7
2015	80.0	90.6	5,350.4

[1] Timber removals include volume "lost" due to land clearing, flooding, thinning, or changes in land use, in addition to timber cut and used.

[2] Based on the following assumptions: (a) that the area of timberland will decline but at an insignificant rate; (b) that radial growth will decline over time in relation to increased stand density; (c) that the intensity of forest management practised will continue at the rate indicated by recent trends; and (d) that the volume of "other" removals will drop during the period as more of these trees are utilized.

Table 97.--Removals,[1] net annual growth, and inventory of growing stock on timberland, Illinois, 1985, and high removals option projections[2] to 2015

(In million cubic feet)

Year	All species		
	Removals	Growth	Inventory
1985	70.2	95.8	4,835.1
1995	86.3	93.7	5,003.7
2005	97.8	93.7	5,016.3
2015	103.9	95.3	4,949.7

[1] Timber removals include volume "lost" due to land clearing, flooding, thinning, or changes in land use, in addition to timber cut and used.

[2] Based on the following assumptions: (a) that the area of timberland will decline but at an insignificant rate; (b) that radial growth will decline over time in relation to increased stand density; (c) that the intensity of forest management practised will continue at the rate indicated by recent trends; and (d) that the volume of "other" removals will drop during the period as more of these trees are utilized.

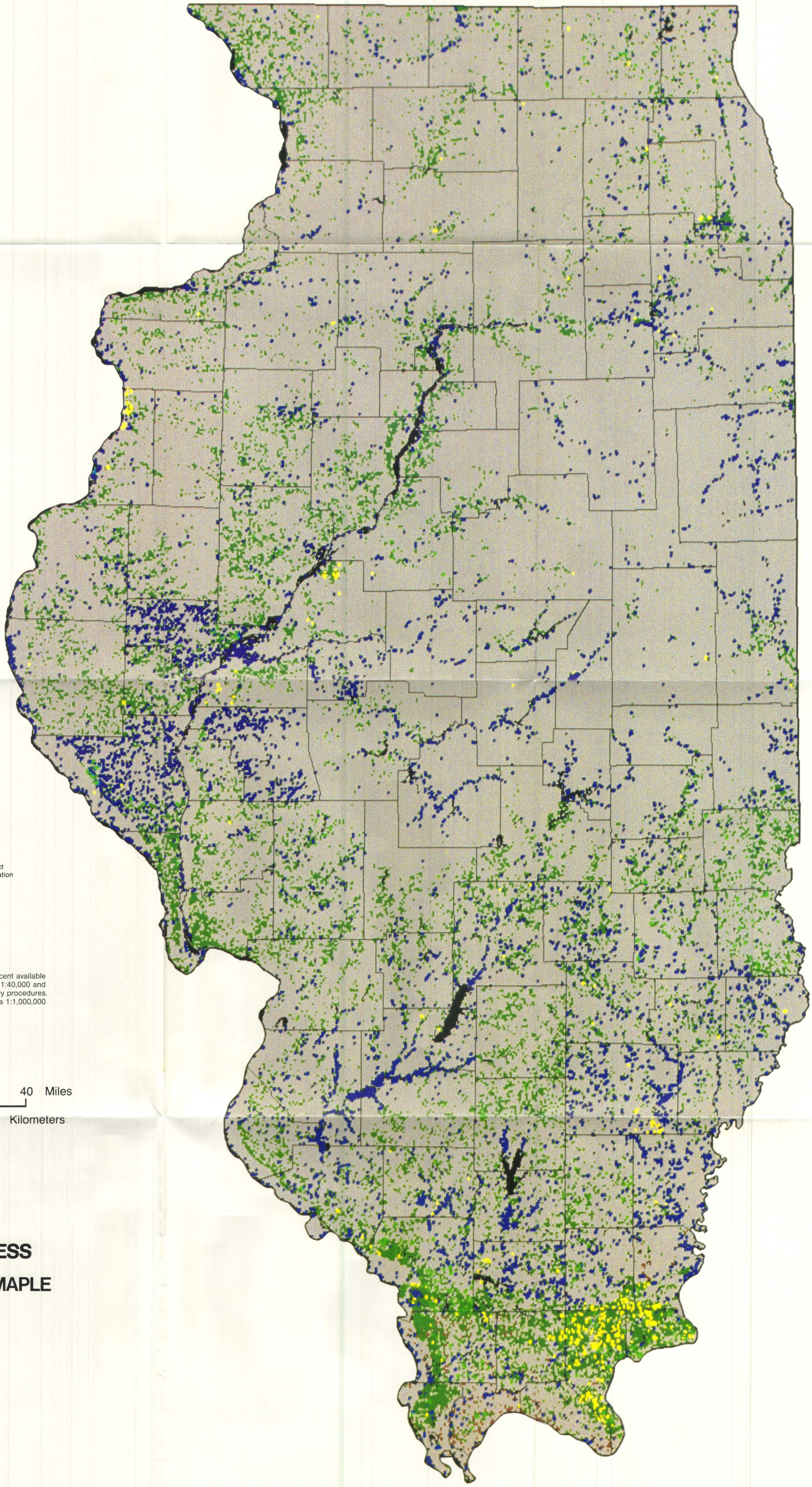
Table 98.--Sampling errors[1] for estimates smaller than the State totals of volume, net growth, removals, and area of timberland, Illinois, 1985

Sampling error	Timberland	Growing stock			Sawtimber		
		Inventory	Growth	Removals	Inventory	Growth	Removals
Percent	Thousand acres	- - - Million cubic feet - - -			- - - Million board feet[2] - - -		
1	5,078.5	19,177.7	1,072.0	9,142.7	112,825.8	12,483.9	47,241.2
2	1,269.6	4,794.4	268.0	2,285.7	28,206.5	3,121.0	11,810.3
3	564.3	2,130.9	119.1	1,015.9	12,536.2	1,387.1	5,249.0
4	317.4	1,198.6	67.0	571.4	7,051.6	780.2	2,952.6
5	203.1	767.1	42.9	365.7	4,513.0	499.4	1,889.6
10	50.8	191.8	10.7	91.4	1,128.3	124.8	472.4
15	22.6	85.2	4.8	40.6	501.4	55.5	210.0
20	12.7	47.9	2.7	22.9	282.1	31.2	118.1
25	8.1	30.7	1.7	14.6	180.5	20.0	75.6
50	2.0	7.7	.4	3.7	45.1	5.0	18.9
100	.5	1.9	.1	.9	11.3	1.2	4.7

[1] At the 68-percent level.

[2] International 1/4-inch rule.

MAJOR FOREST TYPES—ILLINOIS
1985 INVENTORY



Forest Inventory and Analysis Project
North Central Forest Experiment Station
Forest Service
U.S. Department of Agriculture
1992 Folwell Avenue
St. Paul, Minnesota 55108

COMPILATION PROCEDURE

Forest types were interpreted on the most recent available aerial photography for each county in Illinois 1:40,000 and 1:58,000 scale, using standard forest inventory procedures. The forest type information was recorded on a 1:1,000,000 scale map.

Compiled by Ronald L. Hackett

SCALE 1:1,000,000

10 0 10 20 30 40 Miles

10 0 10 20 30 40 50 Kilometers

- PINE
- OAK-HICKORY
- OAK-GUM-CYPRESS
- ELM-ASH-SOFT MAPLE
- MAPLE-BEECH
- WATER
- NON-FOREST

Raile, Gerhard K.; Leatherberry, Earl C.
1988. Illinois' forest resource. Resour. Bull. NC-105. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 113 p.

The third inventory of timber resources in Illinois shows a 1.2 percent increase in timberland and a 40.5 percent gain in growing-stock volume between 1962 and 1985. Text and statistics are presented on area, volume, growth, mortality, removals, utilization, biomass, and future timber supply.

KEY WORDS: area, volume, growth, mortality, removals.

FINDING OUT AND TELLING

Our job at the North Central Forest Experiment Station is discovering and creating new knowledge and technology in the field of natural resources and conveying this information to the people who can use it--in short, "finding out and telling." As a new generation of forests emerges in our region, managers are confronted with two unique challenges: (1) Dealing with the great diversity in composition, quality, and ownership of the forests, and (2) Reconciling the conflicting demands of the people who use them. Helping the forest manager to meet these challenges while protecting the environment is what research at North Central is all about.

NORTH CENTRAL
FOREST
EXPERIMENT STATION